THE ARCHITECT & BUILDING NEWS

16 DECEMBER 1959

VOL. 216

NO. 19

ONE SHILLING WEEKLY

- FOUR PRIVATE HOUSES
- INFORMATION DIGEST

PUBLISHED IN LONDON SINCE 1854

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Old Change House, London EC4, Architect: Theo H. Birks F.R.I.B.A. Contractors: Bernard Sunley & Sons Ltd

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New needs, new architecture, new buildings—and new ranges of Crittall windows.Crittall aluminium windows, designed to match the most forwardand upward-looking architectural concepts and ready to meet the toughest, down-to-earth practical service demands.

Thorough, painstaking researches on an international scale, the application of the most far-reaching advances in design and manufacturing techniques, and a new factory specialising in the production of aluminium windows and equipped with an anodising plant as up-to-the-minute as any in the world. All this, added to Crittall's already long experience in making metal windows of all kinds, will help to make the larger, higher, buildings of the future more efficient to live in and work in, less costly to maintain.

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Old Change House, for the Bernard Sunley Investment Trust Ltd., is fitted with Crittall 'Continental' Windows with 'Solomatic' Venetian Blinds throughout. Write for fully descriptive leaflet to:

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featuring Nairn Vinyl tiles. Photo: Mann Bros. (Courtesy Peter Stead of Design Collaborative)

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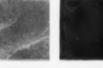


























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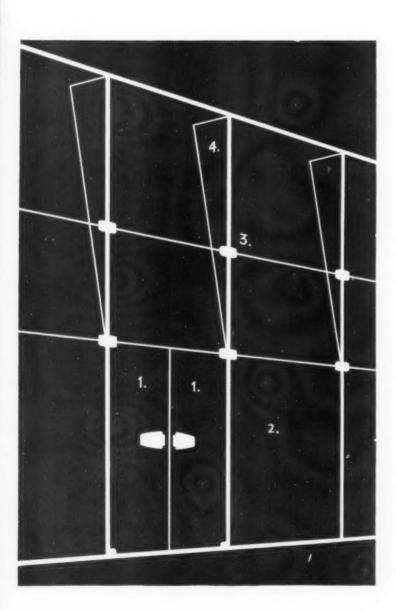
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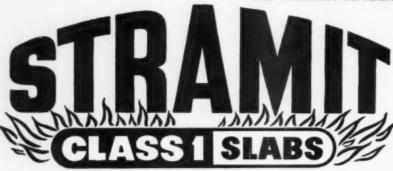
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Please send me full details of Stramit Class I building slabs.

THE ARCHITECT and Building News, 16 December 1959 TOMO double-glazing at London Airport

We think you'll agree that the appearance of these attractive offices at London Airport is enhanced by their TOMO double-glazed WINDOWS. But that's only a small part of the story. TOMO double-glazing also offers excellent thermal-efficiency values, remarkable sound-reduction properties, finely-controlled ventilation and total indoor windowcleaning.

On the subject of thermal efficiency, we should like to refer you to the report of a recent B.R.S. test quoted on the right. It speaks volumes. When you work within whistling distance of aircraft, sound reduction becomes a matter of vital importance. Here TOMO WINDOWS score heavily The total reduction in sound level depends finally, of course, on the thickness of glass employed and the space between panes. Using 32-ounce glass spaced at 12in, TOMO double-glazing gives a reduction of approximately 40 decibels and will, we hope, save Shell-Mex and Esso personnel not a few headaches in the future.

One last point, TOMO double-glazed WINDOWS are suitable for inward or outward opening and can be top-hung, bottom-hung, sidehung or pivot-hung. Any further information you may require will be gladly supplied.

Administrative and operations offices for aviation fuel supplies at London Auport, half of which are occupied by Shell-Mex & B.P. Ltd. and the other by Esso Petroleum Co. Ltd. Architect: Frederick Gibberd, C.B.E., F.B.I.B.A., M.T.P.I.

BUILDING RESEARCH STATION TESTS

- When a standard-production TOMO WINDOW Wall-Unit (8ft, ×8ft.) was tested at the Bullding Research Station, Garston, the
- thermal transmittance of the complete unit was found to be 0.31 8.Th.U.lsq ft.lh'F, This is equal to the thermal transmittance of a traditional 11-in cavity brick wall! This impressive result was further improved to 0.29 when the TOMO pleated blinds, fitted
- between the panes, were lowered. The U-value of the window-area only was found to be 0-38 which, with TOMO pleated blinds down, became 0-35. At 0-38. TOMO double-glazed WINDOWS are substan-
- tially (29%) better than the U-value of 0.47 quoted for conventional double windows in the 1.H.V.E. Guide to Current Practice, 1955.

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Look at the picture. The office is more than adequately lighted, yet the light fittings themselves are not emitting any appreciable glare. The light source is, in fact, unobtrusive.

This is G.E.C. comfort in lighting—a new technique in which the G.E.C. has gone a long way towards removing discomfort glare by using high illumination in conjunction with low brightness fittings of high luminous output. sometimes called "dark" fittings because by correct design and use of suitable materials, they actually appear to be dark.

comfort in

high level illumination without discomfort glare

lighting like this before ...

You have never seen lighting like this before and no advertisement can hope to make clear to you its remarkable superiority over conventional methods. It takes 40 pages of a new G.E.C. publication No. F4695, to do this, and a copy will be sent to you on request.



lighting

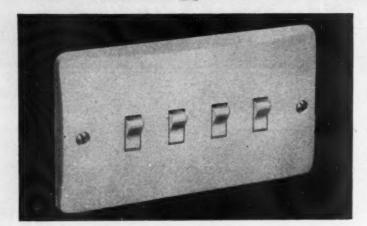
9. E.C.

LIGHTING DIVISION

THE GENERAL ELECTRIC CO. LTD.,
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NEWS from





A NEW 4-GANG PLATESWITCH

This new plaster-depth Plateswitch has 43" fixing centres and is therefore suitable for mounting in the existing 3-gang boxes. All the switches are two-way and may be wired either one-way or two-way. Moulded in brown or ivory, overall size 5%" x 3%".

12/6 each Brown 13/- each Ivory

CONVERSION BOXES

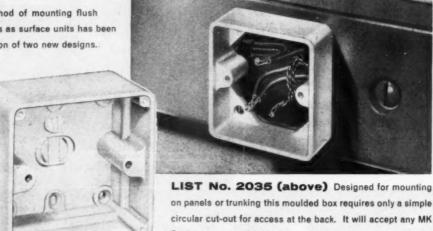
This simple and convenient method of mounting flush accessories with 23" fixing centres as surface units has been further extended by the introduction of two new designs.

The moulded boxes have 4 BA tapped brass inserts. The two patterns shown have been developed for special purposes and have ample wiring room.

LIST No. 2031

This is a deep moulded box Intended for use with DP switched fused spur-boxes.

1/6 each Brown 1/8 each Ivory



on panels or trunking this moulded box requires only a simple circular cut-out for access at the back. It will accept any MK flush accessory with 2%" fixing centres.

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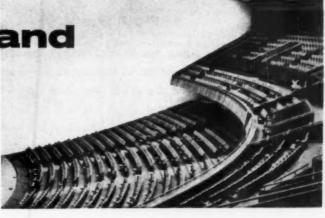


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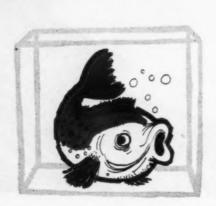


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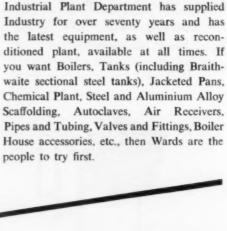
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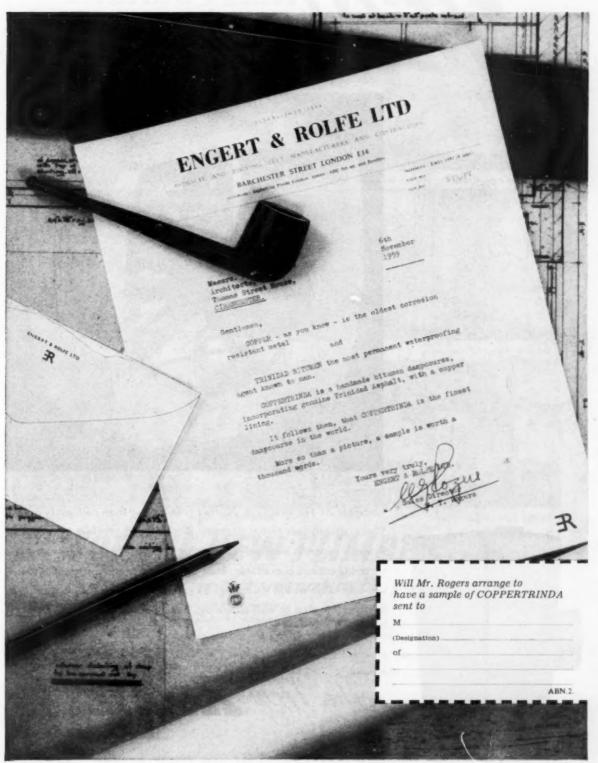
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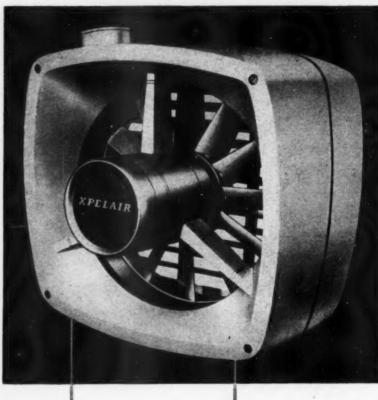
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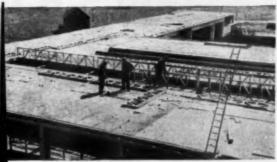
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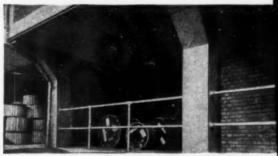
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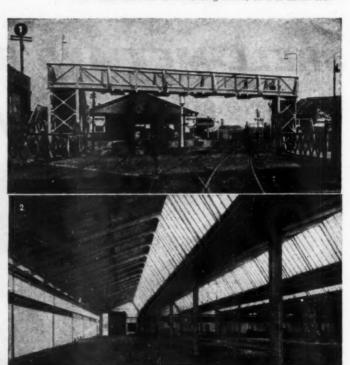
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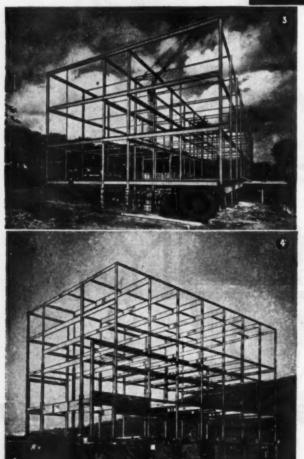
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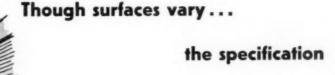
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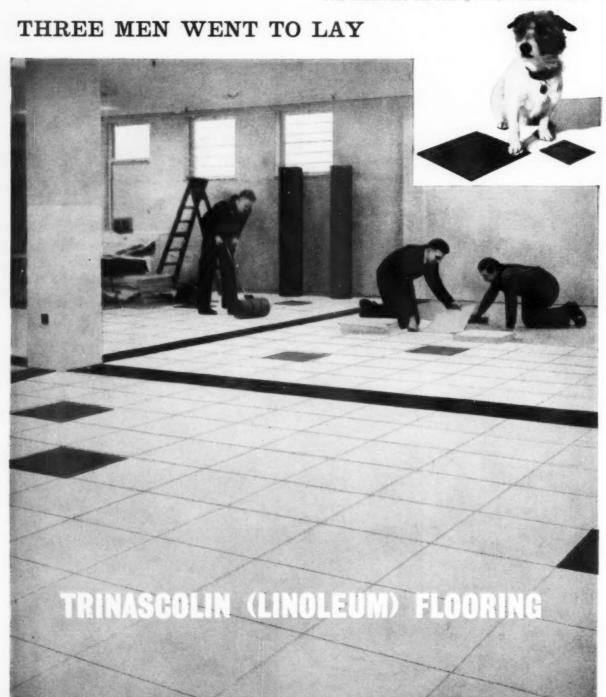
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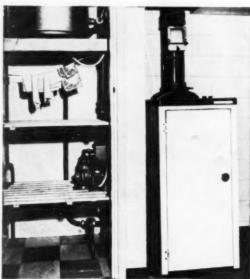
A modern solid fuel boiler, to burn Hard Coke, costs much less than any alternative source of heat. Combined with a small-bore system of piping it provides Central Heating and complete domestic hot water services. With full automatic control it costs far less to install, is cheaper to run and can compete in heating efficiency with any other system.

For larger heating systems

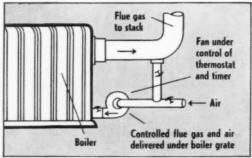
The addition to sectional boilers of an inexpensive, easily-applied conversion unit, thermostatically-controlled, with time-switch will (1) reduce fuel costs, (2) lengthen periods between refuelling, (3) provide automatic heat control, (4) reduce clinkering, (5) enable the boiler to be banked from Friday evening to Monday morning.

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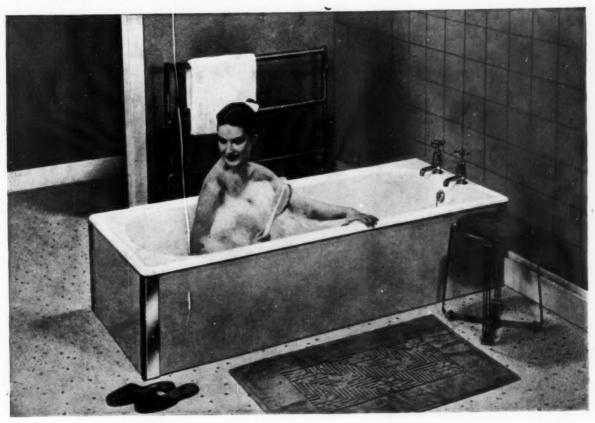


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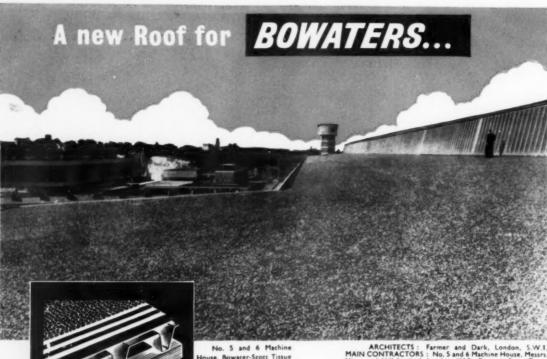
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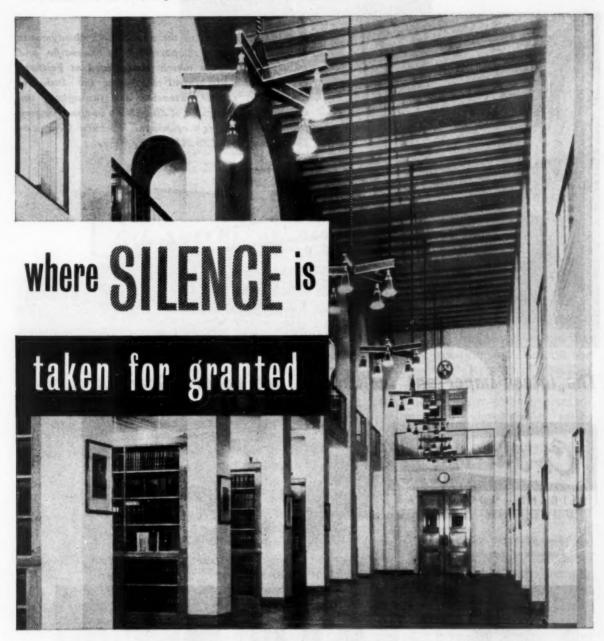
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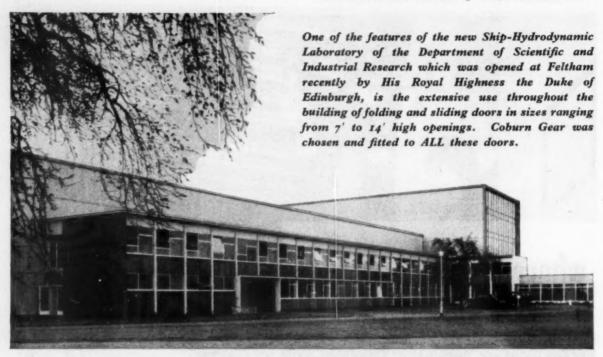
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THE FUTURE OF PICCADILLY CIRCUS

THE public inquiry into the proposals for developing the Monico site, Piccadilly Circus, put forward by Cotton, Ballard & Blow, opens today. Whatever the merits and demerits of this much abused scheme, the outcry against it in Parliament, in the press and on the radio has brought to light two deplorable facts.

First, there is no satisfactory scheme for pedestrians and vehicles agreed for the Piccadilly area and which also forms part of a wider concept to meet the future traffic needs in the Greater London area and beyond, although prerequisite for sound planning is admitted by informed opinion on all sides. Secondly, the Piccadilly area has not been defined a comprehensive development area, a most surprising fact in view of its acknowledged importance and the London County Council's forward thinking in such matters. The reason given by Mr. Richard Edmonds, chairman of the L.C.C.'s Town Planning Committee, is that "it could only be done on the basis of a substantial contribution by the Government to help the London County Council to meet the cost". If cost is indeed the reason for this omission in so defining the Piccadilly Circus area, the government ought to help financially because the area is a matter of general concern to people all over Britain and the Commonwealth and not only to Londoners.

From these two facts the only sensible answer, in our view, to the proposed Monico site development, and any others if they are being contemplated in the Piccadilly Circus area, is to allow no building until the traffic plan has been thrashed out and an outline comprehensive scheme of the architecture has been prepared.

It must then be considered how best to develop; and this question goes beyond the Piccadilly Circus issue. Reports of the Red Lion Square inquiry at Cambridge and the wide dissatisfaction felt for some aspects of "competition-by-tender" development raises issues beyond the scope of this article, but they point to the need for a reappraisal of current building development methods.

PROFESSIONAL BUILDERS

THE Institute of Builders have issued for general comment their revised scheme of examinations* for membership of the institute. The syllabus and specimen examination papers show that the institute aim at a high standard of technical ability in their future membership. The new approach is towards scientific rather than empirical methods of building construction, these and management problems taking equal place with estimating work.

The day will come when the professional builder will take his place in a professional building team. Let us hope he will relieve the architect of many details of common building, such as the construction details repeated endlessly on architects' working drawings of today and some of the tedium of site supervision. The architect will be freer then to concentrate on becoming a better and better architect.

^{*}Revised Scheme of Examinations, Institute of Builders, 48 Bedford Square, W.C.1, price 4s.

EVENTS AND COMMENTS

THE A.B.S. BALL

The tenth annual ball of the Architects' Benevolent Society was held in the Great Room at Grosvenor House last week. Rather more than twelve hundred people attended, of whom possibly a quarter were architects. Among the remainder were many members of other branches of the industry, a number of them entertaining large parties. All tickets were sold long before the day and the profits for the A.B.S. are likely to be about £5,000. The success of this best-seller is almost entirely due to the efforts of Mr. C. J. Epril, F.R.I.B.A., and his organizing committee, who have brought their work to a fine art. The programme, which seemed this year thicker than ever, carried advertisements from most of the important firms in the industry and, tucked away in a corner, the bill of fare for the evening. The theme was Victoriana and students from London schools of architecture had struggled valiantly to make some impression on the décor of the vast one-time skating rink with murals and cartoons and posters, some of which were very good. The side-shows were strongly supported, and this year included a very good Victorian antique stall where prices were most reasonable. The conventional and much-too-vocal music of the same old resident band was varied by a blast of refreshing jazz from the Temperance Seven.

PRESTON SYMPOSIUM

The Preston, Blackburn and District Society of Architects held its fourth annual symposium at Alston Hall from December 4 to 6. The subject was "Efficiency in the Building Team", a development of the theme of the 1959 British Architects' Conference. About 60 architects, quantity surveyors and builders attended. No time is wasted on these occasions and work started at 8 p.m. on Friday night and did not end until 1 p.m. on Sunday with a break of three hours on Saturday afternoon to allow the locals to go to the football. The scene was set by Mr. Rainford, Bursar of Manchester University, who, as a client of very considerable experience, had some scathing things to say about architects and their efficiency. Even allowing for a certain exaggeration it amounted to a serious indictment. At this stage I had the feeling that last year's slanging match was going to be repeated, but happily this was not so and subsequent speakers were

more moderate in their attacks and as a result more constructive.

Mr. Peter Dunham spoke of the organization of a small provincial practice and was at once recognized by the audience as having his feet firmly on the ground. Often on these occasions the speakers describe events and circumstances far removed from the personal experience of the generality. Mr. Dunham's problems were those of the majority of his audence. Among other things he spoke of the difficulty of communication between partners in a widely scattered practice. Rigid periodical meetings did not work and they had found that a circular newsletter was the most satisfactory way of keeping each other informed. The firm also made a practice of using its secretaries as information officers on jobs, so that when partners and assistants were out, there was always someone in the office who knew what was going on. This they find gives the secretaries added interest in their work and considerably helps the running of the office.

and considerably helps the running of the office.

The quantity surveyor's point of view was put by Mr. W. James, chairman of the Q.S. committee of the R.I.C.S. He explained methods he had developed for the better exercise of cost control and showed slides of the forms and methods of analysis used. He stressed the value of architects' rough details when bills were being prepared. He also talked about the general suitability of architects' working drawings. All services, he thought, should be shown on the same drawing, otherwise co-ordination of builders' was very difficult. From the discussion which followed it was clear that builders seldom take the trouble to look at the drawings always made available to tenderers. This was criticized on two grounds: first, that it showed that the average contractor had little interest in architecture; and, second, that without seeing the drawings a tenderer must have a very incomplete idea of the work involved. Several architects present stated that they always sent out general arrangement drawings with quantities when inviting

Mr. Peter Shepherd, of York, speaking for the builders, made a most valuable contribution. He let off no fireworks, but his remarks were constructive and where he criticized he also suggested improvements in procedure. He appealed for simpler language, for the wider use of the word "builder" as the person who put up buildings and for the use of the word "construction" as the actual process of building a building. The term "building construction" used in its familiar text-book sense should, he thought, be dropped. Mr. Shepherd also thought that architects, when designing buildings, should give more consideration to the probable effects on costs of what he called

Winners in the Architects' Benevolent Society Symbol Competition are illustrated below. Left to right, first: G. Stephen Crossley (25 gns). Second: Brian Whateley, A.R.I.B.A., (15 gns) Third: J. K. Quirk (10 gns)







discontinuity of processes, lack of repetition, nonstandard items, excessive variety of materials and avoidable waste. In the team itself, Mr. Shepherd considered that the quantity surveyor should be more independent and not always take the part of the architect. This had led many builders, including Mr. Shepherd's firm, to employ their own quantity surveyors to guard their interests—a most wasteful procedure.

Mr. Shepherd asked for prompt payment for work completed and quoted a semi-official figure of £100 million underpaid to builders for completed work. In discussion architects and surveyors present hotly denied that they were to blame. The builders, too, denied any charges brought against them. However, it seems to me that even if the sum quoted was exaggerated by 150 per cent, the builders still have a justifiable complaint. Mr. Shepherd thought that certain clauses of the R.I.B.A. form of contract needed revision, but the general opinion of the audience seemed to be that if the present form was properly used it was perfectly satisfactory. Concluding what was a remarkably able address, Mr. Shepherd called for

mutual respect and confidence between architect and builder. Last year at this stage in the symposium I would have thought this to be a wild dream. This year, as a result of soberer, but no less forthright, speaking, it seemed a not unreasonable hope. We shall, I have no doubt, hear more of Mr. Shepherd. In a final session, Mr. W. S. Forbes, of the Building Research Station, talked about work-study and productivity on building, His contribution was spoiled because he was unable to show a film he had brought, but by means of slides he showed the considerable effect on costs of quite simple variations in design. It was a worth-while weekend, for discussion started at breakfast and continued all the time. Preston can fairly claim to lead the field in these annual events and not a little of the credit for it is due to Mr. R. Allport Williams, deputy county architect for Lancashire and president of the Preston, Blackburn and District Society of Architects. I noticed that, although each member of the building team, and the client as well, made accusations of the inefficiency against the others, there were no admissions and endless denials. It is difficult to believe that everyone present was blameless.

ABNER

Letters to the Editor

Asphalt Floor Finishes in Factories

Sir,—In your review of the publication Floor Finishes for Factories, Study No.3 (page 534, "Information Digest," A. & B.N., November 25, 1959), the following reference is made: "Asphalt is free from dust but may be too soft for static loads."

Whilst this is a reasonably factual statement in regard to the normal grades of asphalt complying with British Standards, to meet the position, if loads are very heavy the member companies of my council have prepared special grades of asphalt which do not indent under the normal loads that can be expected in almost any factory, and are also suitable over electric floor-warming panels.

There are further grades of mastic asphalt largely used in ordnance factories where sparks resulting from friction might cause explosions; other grades are available for chemically resistant floors; both these types of floors are mentioned in your review.

L. G. WATKINS,
Director,
The Natural Asphalte
Mine-owners and Manufacturers Council.

Basildon Housing and the Radburn Idea*

Sir,—Enthusiasm isn't enough. Balanced judgment is required where all is not black and all is not white.

I asked Mr. Ritter to give definite examples of what he considers to be the best Radburn type planning in low-cost housing in this country, and have had no reply to this reasonable request. I imagine I have done as much research into such matters as he has, and I am anxious to see how proposals which have certain obvious merits, and also certain disadvantages, stand the tests of actual usage.

One does not get beyond an elementary stage of study by considering plans on paper or models and one-sided arguments. The real test is to question the tenants, question the housing manager. Question the tradesmen, question the postman and the police; question the furniture remover, the motorist and the cyclist, the dustman, the rent collector, the coalman, the parents, the grandparents and the children. One will not necessarily get intelligent

answers from this research, but if there are definite points of merit or dislike they will surely emerge.

More cogent still is the need for economic study.

Again, motor accident statistics should be studied, as quite often the planners' attempts at segregation, safety, adequate sight lines, etc., produce schemes which, in practice, are so tiresome and tortuous as to be dangerous. I would instance one new town where the roads are so contrived to disallow through traffic that it is almost impossible for anyone to get anywhere, and one goes round and round and up and down culs-de-sac and does at least four times the mileage really necessary. The frustration and annoyance to motorists and tradesmen and the amount of reversing, wastage of time and petrol, leads to bad-tempered and over-hurried driving.

In this connection, might I mention, quite off the point, that at one new town many of the carefully contrived zig-zag intersections are done the wrong way and are definitely dangerous.

Yours, etc.,

W. CRABTREE.

Plans for Sale to the Public

Sir,—My council have had under consideration the recent competition as a result of which the public can now purchase books of the thirty selected small house designs and also the working drawings of any of them at a nominal cost.

It is understood that the organizers of this competition sought to improve the standard of design of small houses, to encourage the employment of architects by the public, and to provide further opportunities for architects. My council are fully in accord with these admirable aims but share the concern of a number of architects, who have written to the institute on the subject, that this is not the most suitable or effective way of realizing them.

Concern is also felt about the possible effect of this scheme on architects in private practice and the cut-fee basis which results from its operation.

My council feel strongly that this whole idea is unfortunately conceived and should be re-examined.

Yours, etc.,
A. E. WARD,
Secretary,
Institute of Registered Architects.

*See "Letters", A. & B.N., Nov. 25, Dec. 2, 9, 1959.

NEWS

Reconstruction of Nos. 10, 11 and 12 Downing Street Statement by the Prime Minister

In the House of Commons (Tuesday, December 8) Sir Godfrey Nicholson (M.P. for Farnham) asked the Prime Minister whether he had yet taken any decision about the reconstruction of Nos. 10, 11 and 12 Downing Street.

Mr. Harold Macmillan, in a written reply, stated: "Although there is no immediate cause for alarm, the condition of the houses, Nos. 10, 11 and 12, in Downing Street, is deteriorating. It has, therefore, been decided that the work of reconstruction, on the lines recommended by the Crawford Committee on the Preservation of Downing Street, should be put in hand as soon as possible. Preliminary planning is now well advanced and work is due to start at the beginning of the Summer Recess in The task is expected to take about two years to complete, and while it is in progress, Admiralty House and adjoining buildings will be used.

"As recommended by the Crawford Committee, the reconstruction of the Treasury buildings in Whitehall will be undertaken simultaneously with the Downing Street work. The combined cost of the work on the Downing Street houses and the Treasury is thought likely to be of the order of £1,250,000. Proposals will be laid before the House of the necessary financial provision to be made

in the financial year 1960-61.

Nos. 10, 11 and 12 Downing Street are all that now remain of a square of private houses built as a speculation in the latter part of the seventeenth century, by Sir George Downing, on land leased to him by the Crown. They have been radically altered in the centuries since were built.

In his plans for the reconstruction of Nos. 10, 11 and 12 Downing Street, the architect, Raymond Erith, has followed very closely the recommendations of the Craw-

ford Committee.

No. 10 Downing Street

Though No. 10 is old, it is surprisingly well suited for its present purpose, and the arrangement of the rooms which has evolved almost naturally over the years is essentially right. Mr. Erith has not, therefore, proposed any alterations in the main disposition of the rooms, and his aim has been to improve the building by working within its established framework. His proposals are mainly directed at improving the vertical and horizontal communications, letting in light, and generally tidying-up the piecemeal additions which have been made over the

course of the last 100 years.

The office accommodation at No. 10 has in the past had many drawbacks, particularly that of overcrowding, and the office staff have overflowed into the Treasury. Erith's proposals involve the reconstruction of the single-storied wing at the east end of the Downing Street frontage, which will be taken up higher but on a line with the rest of the house. There will, therefore, be very little increase in the space provided behind the frontage of No. 10. The main increase in space will come as a result of rebuilding No. 12 to its original height and also from better use of the space available. To expand the Prime Minister's accommodation, some of the rooms behind the frontage of No. 11 will be allocated to the occupants of No. 10, and some of the Chancellor's accommodation moved into No. 12 as reconstructed. None of the rooms historically associated with the Prime Minister or the Chancellor is affected.

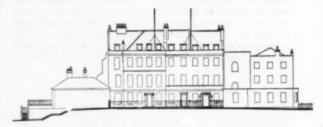
All the State Rooms on the first and ground floors of No. 10 will remain unaltered. Historic features such as the panelling and ornamental cornices of the principal rooms, including the Cabinet Room, will be retained.

One of the principal internal alterations in No. 10 will be the addition of another staircase behind the disused doorway between the entrance doors to Nos. 10 and 11.

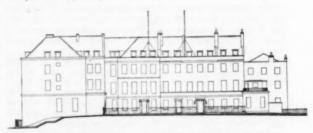
There is an enclosed courtyard in No. 10 which has, in the past, been built in as and when extra space has been needed. Mr. Erith's proposal will restore this as a feature of the house.

Changes in No. 11

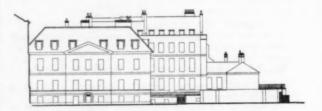
Mr. Erith proposes to leave the State Rooms in No. 11 very much as they are at present; but in order to make room for the expansion of the Prime Minister's accommodation the Chancellor's new living accommodation will extend over No. 12 Downing Street. The Chancellor will keep the present hall and entrance and the State Rooms,



The Downing Street frontage as it is now. No. 12 on the far left was cut down to a single-storey building after a fire in 1879. The wing of No. 10 on the right which contains the back stairs (left) and the Soane dining room (right) is set back from the main frontage and has a singlestorey annexe in front of it



The Downing Street frontage as proposed. No. 12 will be rebuilt to its original height. No. 11 will remain unaltered. To the right of No. 10 a room has been added on each floor in front of the back stairs



The garden front facing the Horse Guards Parade as it is now

The garden front facing the Horse Guards Parade as proposed. The main change is seen at the right where No. 12 will be rebuilt to its original height



including the Soane Dining Room and the big Drawing Room. At present the accommodation in No. 11 is linked to the terrace in the garden by a bridge. Mr. Erith proposes to do away with the bridge by extending the Soane Dining Room westwards so that it will itself form the link. This will also make the room longer so that more people can be seated at the dining room table. This is the only major alteration to an historic room in Mr. Erith's proposals, and it has been very carefully designed so as not to spoil the proportions of the room itself. A lift will be installed in No. 11; its absence was the main drawback to the house noted by the Crawford Committee.

Changes at No. 12

Only the stump of No. 12 has remained since the building was burnt down in 1879, and no historical or architectural features of importance survive. Mr. Erith proposes to rebuild No. 12 to its original height, treating it as an extension of Nos. 10 and 11. The accommodation inside will provide the extra space needed for the occupants of all three Downing Street houses and will cater for changes in staffing between Governments.

External Appearance

The principal changes in the appearance of the Downing Street houses have already been mentioned, the demolition of the accommodation over No. 10, the alteration to the east frontage of No. 10, and the rebuilding of No. 12 to its original height and its extension towards St. James's Park. All these are illustrated on the facing page by the sketch elevations of how the buildings will look compared with those showing their present appearance. Mr. Erith's proposals for the elevations have been discussed from time to time with the Royal Fine Art Commission who have been in agreement with the lines on which he is working, which, in turn, were mainly those recommended by the Crawford Committee in its report.

Result of Law Suit Saves L.C.C. £100,000

It was reported to the L.C.C. yesterday that the reversal, on appeal to the House of Lords, of a judgment in favour of a claim against the council (A. & B.N., December 2, 1959, page 552) for increases in contributions for holidayswith-pay under a contract for housing works will affect claims in about 200 other contracts, saving the council not less than £100,000.

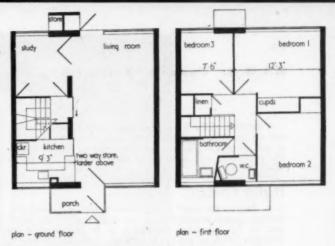
The General Purposes Committee comment that the outcome of this law suit is likely to be of considerable benefit to public authorities throughout the country.

Development Plan-Urgent Amendments

The Town Planning Committee proposed to the L.C.C. yesterday that the Minister of Housing and Local Government should be asked to make amendments to the development plan, without waiting for the quinquennial review, to enable the St. George's Market Area, Southwark—the area of nearly 4½ acres, bounded by London Road, Thomas Doyle Street, Keyworth Street and Ontario Street—to be redeveloped comprehensively, and rezoned for residential purposes, shops and offices. The area includes a number of bomb-damaged and derelict sites.

Rock and Water Garden at Crystal Palace

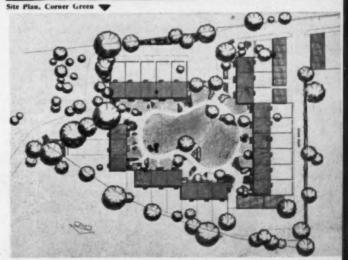
A scheme has been approved for a rock and water garden on both sides of the ravine in the southern section of the Crystal Palace grounds. The bridge will be retained and faced on each side with a stone arch surmounted by wooden balustrading, this balustrading being repeated on the inside face of the bridge so that all ironwork will be concealed. Water for the waterfall will be supplied by the electric pump installed in connection with recent improvements to the lake-side area. Stone valued at approximately £2,800 found in the grounds will be used for the greater part of the rock work. Cost of the scheme is estimated at £16,030.



THE MILLIONTH HOUSE

One of the Span houses at Corner Green, Blackheath, is privileged to have the numerical distinction of being the millionth house compl ted by private enterprise developers since the war. To mark this event Mr. Henry Brooke, Minister of Housing, was present at Corner Green last Monday week to formally declare the "1,000,000th house" open, and hand over the key of No. 16 to Mr. and Mrs. Lowry Sanders, the future occupants. In his speech Mr. Brooke came out strongly in favour of modern house designs like the Span development (consultant architect, Eric Lyons)





R.I.B.A. Council Notes, 8.12.59

A meeting of the R.I.B.A. Council took place last week, and on the following day a press conference was held by A. G. Sheppard Fidler, vice-president, as Basil Spence, the president, was away with the secretary visiting an allied society.

Higher Council

A "Higher Council" of representatives of all those professions concerned with land use, suggested by the president in his inaugural address, is to be discussed at an informal luncheon party, on January 12, by the presidents and secretaries of the Civils, Structurals, R.I.C.S., T.P.I., and Landscape Architects.

University Grants Committee

The Board of Architectural Education have met members of the University Grants Committee and explained the views of the Oxford Architectural Education Conference Committee on the question of schools of architecture in universities, the importance of Nottingham and Bristol being stressed.

The representatives of the U.G.C. (Sir Keith Murray, chairman; E. R. Copleston, deputy secretary; and Stanley Meyrick, chief architect) said that the matter would be given the most careful consideration in connection with the forward planning on which they were engaged.

Private Architects' Work

The results for the third quarter of 1959 show a considerable improvement in the level of new commissions reaching private architects compared with the same period of 1958. New commissions for private housing were more than doubled, and those for industrial building also showed a marked improvement. Commissions for offices and banks have been running at a low level throughout the year, but those for other commercial buildings show signs of an increase. More work was also reaching private architects from the public authorities.

Industrial Development and Preservation of the Countryside

Following up the House of Commons debate—industrial development and preservation of the countryside—on a motion moved by W. E. Deedes, M.P. for Ashford, Kent, on Friday, November 20, the Minister of Housing, Mr. Henry Brooke, and Sir Keeth Joseph, his Parliamentary Secretary, have accepted an invitation to a small luncheon party at the R.I.B.A., early in the New Year, for an informal discussion on the subject. A suitable date is now being sought.

Liaison Overseas

The council have recommended that the expenditure be approved for the president to attend the annual assembly of the Royal Architectural Institute of Canada, to which he has been invited, if he is able to attend.

Hospital Conference

The symposium on the design of high buildings, which was to have been sponsored jointly by the R.I.B.A. and the Yerbury Foundation, has had to be postponed until the beginning of the next session, because financial arrangements cannot be finalized in time. To replace it, a hospital conference, from May 23 to 27, 1960, is being arranged, with the assistance of the Ministry of Health, the Nuffield Foundation, the King Edward Trust, and the regional hospital boards. It is intended that it should form an introduction for architects who have not pre-

viously designed hospitals but who may well be doing so over the next few years in view of the extensive programme that is planned.

R.I.B.A. Dinner

The Social Committee of the R.I.B.A. are to consider preliminary arrangements for a reception early in 1960.

R.I.B.A. Committee Structure and Allied Societies

The council have issued this statement on the subject: The president of the allied societies have met the Constitutional Committee and have reached the satisfactory compromise on some of the important points. There is to be a further meeting on January 4, 1960.

A.B.S. Finances

The president, Basil Spence, has suggested to the council that there should be a voluntary annual subscription of 5s per member (2s 6d for students) to the funds of the A.B.S. This has been warmly welcomed by the council who have asked the Finance Committee to report back to them on the matter.

Law and Administration

Town and Country Planning Powers

There have long been complaints from local authorities and from the public about delegation arrangements under the Town and Country Planning Act, 1947. Hitherto, this delegation of powers by county councils to county district councils (i.e., non-county boroughs, urban and rural districts) has been achieved by individual delegation agreements, each one approved by the Minister.

The public have complained about this arrangement (it could not be called a system), because of the multiplicity of different results which have ensued and the tedious delays so often involved. The county districts have complained because in their view insufficient delegation took place, especially to the larger district councils, some of which are very large indeed.

A change in these arrangements was promised in the White Paper published in May, 1957. Certain changes are now rendered possible by the *Town and Country Planning* (*Delegation*) *Regulations*, 1959. The effects of the new Regulations are described in *Circular 58/59*, published by the Ministry of Housing and Local Government.

The Regulations came into effect on December 1, 1959, but they do not apply to the Metropolitan area, as defined in the Fifth Schedule to the Local Government Act, 1958. Broadly speaking, the Metropolitan Area consists of the counties of London and Middlesex and certain adjacent county boroughs and districts.

Under the Regulations any district council with a population of more than 60,000 may claim to have certain planning power delegated to it as of right. It may do this by serving a notice on the local planning authority within three months of the Regulations coming into force or of the date on which it reaches a 60,000 population. The local planning authority are required thereupon to delegate to the district council the powers concerned and this delegation shall take effect not later than six months after the service of the notice of claim.

The powers concerned are, in general terms, all those concerned with development control (set out in Part III of the 1947 Act), except those concerned with mineral working, building preservation orders and agreements with owners about the regulation of land development. On the other hand, the planning authority is required to

Continued on page 614

L.C.C. NATIONAL YOUTH AND SPORTS CENTRE CRYSTAL PALACE

THE L.C.C. was asked by its General Purposes Committee yesterday for authority to go ahead with the construction of the National Youth and Sports Centre at Crystal Palace. Plans for this centre were approved in November, 1954, and drawn up in 1955.

The centre will meet the need for a central home for amateur sport where, by the provision of training in leadership and facilities for sports and athletics, young people can be encouraged to take part in a wide range of physical recreation.

The Central Council of Physical Recreation has stated that it would

The Central Council of Physical Recreation has stated that it would be willing to undertdake the running and maintenance of the centre, subject to certain financial provisos which are still the subject of consultation.

Planning

The centre will occupy over 36 acres of the old exhibition grounds with access from Crystal Palace Low Level station or from the Penge entrance of Crystal Palace Park.

The main sports hall, gymnasia and other facilities for indoor training entrance people with changing

The main sports hall, gymnasia and other facilities for indoor training, swimming pools with changing rooms, and facilities for spectators, will be concentrated in a single large hall. This will be approached by a bridge continuing the old central avenue of the Crystal Palace across the main outdoor sports and practise area; below the bridge will be 120yd covered running track.

This building will also include prace.

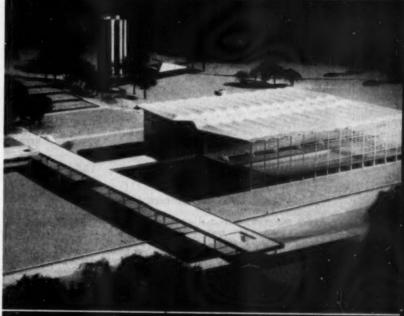
This building will also include practise rooms for cricket, lawn tennis, squash courts, lecture theatre, first-aid room, changing rooms and a small coffee bar.

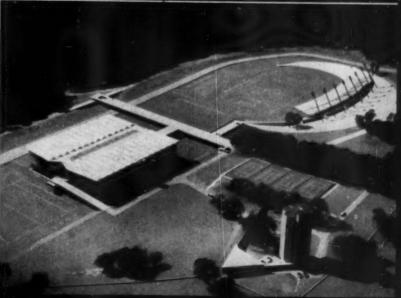
The sports hall will be surrounded by open-air games, pitches and practise areas, with an arena and stand to accommodate 12,000 spectators.

A new addition to the original plan is an 11-storey brick-built hostel block with 46 single and 46 double rooms. This is linked to a two-storey building containing a common room, dining room and kitchen. This residential accommodation is planned as a memorial to the late king, and the King George VI Foundation have contributed £100,000 towards it.



Left, the 11-storey hostel block linked to a two-storey building containing a common room, dining room and kitchen. Below, the main sports hall. This is approached by a bridge continuing the old central avenue of the Crystal Palace across the outdoor sports and practice area (bottom photo)





Parliament

Earl asks about Embassy Plans

A Government representative in the House of Lords on Tuesday was questioned about the proposals for the new

United States Embassy in Grosvenor Square.

The Earl of Airlie asked who was responsible for permission being given to erect the proposed new Embassy and whether the Royal Fine Art Commission were consulted at any time, especially as Grosvenor Square already had such fine examples of American Colonial architecture, and why permission was granted to depart from this style.

Lord Brecon, for the Government, said permission for the erection of the new embassy was granted by the L.C.C. as local planning authority as long ago as October, 1956, after consulting the Royal Fine Art Commission.

He quoted from the commission's annual report which explained that one of the conditions in the architectural competition was that existing scale must be preserved. (December 8.)

Request for Debate on Downing Street Plans

Mr. Emrys Hughes (Lab., South Ayrshire) on Thursday asked the Government to provide time for a debate on the plans to carry out the reconstruction of Nos. 10, 11 and 12, Downing Street.

He wondered if the Government realized that there was

considerable criticism of the proposal to spend £1,250,000 on the reconstruction plans and asked for an opportunity to discuss the matter before the Government was committed.

Mr. R. A. Butler, the Leader of the House, said he was sure no one was keen to see any disturbance at Number 10. This was a matter long canvassed and which he thought

the Prime Minister had discussed with Mr. Hugh Gaitskell,

the Leader of the Opposition.

Mr. Butler said he considered the proposals were a matter which were necessary in the long-term interests of the buildings. (December 10.)

Brick Supplies: Commons Questions

There have been further questions to the Minister of Works this week in the Commons about brick supplies.

Mr. Eric Fletcher (Lab., Islington, E.) asked to what extent current programmes of constructional and building work within the purview of his department were impeded

by the shortage of bricks.

The Minister, Lord John Hope, told him: "While there have been a few instances of difficulty, flexibility in specifiction has resolved them and my department's work programmes have not been noticeably held (December 8.)

Government Statement About George Square

Mr. J. S. Maclay, the Secretary of State for Scotland. made a statement in the Commons on Tuesday concerning the discussions going on about Edinburgh University's controversial plan to redevelop the east and south sides

of George Square, Edinburgh.

He said it now appeared possible that construction of buildings for the university's most urgent requirements, due to start next year on ground near the south-east corner of George Square, could go ahead without prejudice to a final decision on the future of the existing houses fronting the square or on the future layout of modern development in the vicinity.

If that was so he understood the amenity societies would not, in principle, be opposed to this course, and consultations were proceeding in order to clarify the position.

He added: "At the same time, the university and the amenity societies have agreed on a joint examination of practical possibilities with a view to devising a specific alternative plan for meeting the university's present and future needs adequately and timeously, incorporating the new building near the south-east corner of the square but without demolishing the existing houses on its east and

south sides.
"If an alternative plan is found to be practicable, objective comparison with the university's present proposals will then be possible and will, I hope, lead to an

agreed decision." (December 8.)

Law and Administration—continued from page 612.

consult the district council upon decisions affecting the excepted matters first mentioned.

Some conditions are attached to this delegation. Where the district council propose to grant permission contrary to the development plan provisions, or any notified amendments to them, they must obtain the prior written concurrence of the planning authority. Further, all documents must state that the powers exercised by the district council are exercised on behalf of the planning authority. Finally, but, most important of all, any compensation payable as a result of the exercise of delegated functions is to be borne by the district council concerned, save, of course, for any relevant Government grant contribution and save where there was some prior agreement to the contrary.

The Regulations also empower the Minister, where he is satisfied that circumstances justify such a course, to require similar delegation to a district council which has a population below 60,000. Any district council wishing for such delegation must make application to the Minister. How-

"The Minister considers that it would now be right for county councils to review their arrangements for the exercise of planning powers, taking into account the views of the district councils, and, where appropriate, to revise those arrangements in order to give to district councils who so wish, and to whom adequate technical advice is available, an additional measure of delegation and freedom of action, bearing in mind the size and characteristics of the county and the county districts, and the need for efficiency and economy in administration . . . It does not seem to the Minister that it is essential that the same pattern should be followed throughout a county. county districts within the same county vary considerably in size and resources, it seems to him reasonable that some districts might have a greater measure of delegation than others.

For the rest, the Regulations merely repeat the repealed earlier Regulations which relate to the present delegation agreements which in many cases will continue to stand.

The circular, however, introduces one new note, urging greater association of district councils with the prepara-

tion of town maps.

"It seems to the Minister that, where the planning authority think a town map to be needed for an area within a single county district and the district council have the necessary staff, that council should be given the fullest opportunity of co-operating with the planning authority in the survey and of preparing a first draft of the town map; and that, where a town map has already been prepared for such an area, the district council should, when the need arises, be given an opportunity of co-operating in the fresh survey for the purposes of the quin-quennial review and of preparing and submitting to the county council proposals for alterations or additions to the town map.

"Where this cannot be done, for example, where the pre-paration of a town map affects more than one county district, the fullest consultation between the county and district councils should be maintained from the earliest

stage of the preparation of any town map.



Tournai Cathedral, Belgium

ROUND AND POINTED

BRYAN LITTLE

BELGIUM, for the architectural tourist from this country, tends mainly to mean some of its northern towns. Brussels, perhaps, is of less note now than it was during the exhibition of 1958. Antwerp, Malines, Ghent and Bruges, for ancient architecture at all events, are the normal magnets. Yet not one of their buildings can rival the varied, sharply contrasting interest of the great cathedral at Tournai, in the French-speaking part of Belgium, not far from the French frontier and better approached by train from Calais or even Paris than from the Englishman's normal entry port of Ostend.

By contrast with so inviolably classic a building as a Greek temple a medieval cathedral can be in differing idioms, and of widely varying dates, and yet present an interesting, satisfying whole. Even Salisbury, our nearest English equivalent to a Parthenon-like unity of design, is not all of a single period, and within its thirteenth-century work there are considerable changes in detail from one end to the other. More frequent are the buildings where Romanesque and Gothic bed down together, occasionally with some attempt, as at Gloucester and Norwich, to assimilate the earlier Norman to the later Gothic work. Yet very seldom do we see so stark a change as Tournai Cathedral presents from characterful Romanesque to Gothic of considerable finish and perfection, from Germanic architecture to that of France. Our nearest equivalent, perhaps, is

at Southwell, where a splendidly unaltered Norman nave leads on, past the transepts, to an early Gothic choir of great interest and high quality. But there the roof level is at least maintained throughout at about the same height. In Tournai Cathedral a Romanesque nave of modest height gives way to the soaring loftiness of its French Gothic eastern limb, the transition being specially noticeable from outside.

The nave, whose Romanesque design is of a character more French or Norman than Germanic, is of interest for two points. First, its composition is in four tiers, not the usual three of arcade, triforium, and clerestory. Above the triforium, whose unusually large arches exceed in height those of the arcade, one sees, below the simple windows of the clerestory, a curious, some-what ugly and purposeless range of low blank arches having squat little pillarets and still smaller blank openings enclosed by their rounded outline. The piers, and the shafts of the arches in the triforium, are built of the dark grey stone of the locality; its colour makes a good contrast to the pale orange plaster which has been used, in the major repairs made necessary by war damage, to redecorate the nave's walling. Where people rub against the corners of pillars the dark stone takes on a polish which is very nearly black, and thus one recognizes the polished black stone of the "Tournai marble" Romanesque fonts at Lincoln, Winchester, and

ROUND AND POINTED

elsewhere. These fonts, it would seem, were "for export only" in the twelfth century, for I spotted none in the

parish churches of the city. More spectacular, within and without, is Tournai's transeptal limb with the amazing cluster of towers which gives this cathedral a silhouette perhaps unique and by itself an ample reason for a visit to the place. For the central tower has around it four taller towers, arcaded in several stages and quite sturdy enough to be classed not just as turrets which flank their transepts in a daringly Rhenish manner, but as proper towers acting perfectly as a fourfold foil to the central structure. In conception, these two pairs of towers are as Rhenish Romanesque as are the fine round-ended transepts which lie between them; one, however, was built late enough for its profuse arcading to be early Gothic of the thirteenth century. Inside the cathedral the three original crossing arches which still remain are also slightly pointed in the manner of our "Transitional". But the actual transepts are round-arched Romanesque with a difference, having apsidal interior arcades of tall round pillars, quite unlike those of the nave and probably later. Behind them, unusually in a transept, one finds ambulatories, while above the arcade in each transept is a tall triforium, and then, as in the nave, another curious "intermediate" storey, made up this time of pillarets without arches but supporting a horizontal cornice.

Contrast of Choir and Nave

The Romanesque choir, it is thought, had its own pair of flanking towers. Of all that, not a trace remains. East of the marble screen (a lovely Renaissance work of 1572 by Cornelis de Vriendt, who designed Antwerp's Town Hall) the architectural contrast, foreshadowed as one looks east from the nave, is breathtakingly complete. A thirteenth-century bishop of Tournai, impressed by the great new Gothic cathedrals he had seen in France, decided to rebuild his own cathedral entirely in the newly fashionable style. We may be thankful that his funds did not allow him to replace the nave and the five surviving towers, but his French Gothic choir, of seven narrow bays with a chevet and a set of rather shallow little chapels leading out of its ambulatory, is an admirable, straightforward work in what we in England would call the Geometrical idiom. Its design derives from that of Amiens, with some differences of detail and with a lower, better

View showing the five towers of Tournai Cathedral



proportioned internal height. In the clerestory, the middle lights of each window is strangely narrower than the other two, and one notices how much less good are the bosses than those found in English work of the same date. Yet, all in all, this choir at Tournai is a splendid achievement, amply providing that contrast with the nave that makes this cathedral so very exciting a blend of styles.

Two other items alone need mentioning of the many points of architectural interest that Tournai has to show.

Round Tower of Henry VIII

In the north-west part of the city a massively built round tower, now solitary and rather forlorn but once part of a complex citadel, has English associations. For it was built by Henry VIII, soon after 1513, when he took Tournai and held it for a few years. In its design it clearly differs from such late medieval fortifications in this country as the keep and great gatehouse of Raglan Castle, seeming more to belong to the school of military engineering which, late in Henry VIII's reign, produced the well-known coastal castles of Walmer, Portland, Pendennis, and others. Mr. Howard Colvin tells me that the master mason for the Tournai citadel was named George Sellars, but that no overall designer seems to have been used on this particular fortress, which one cannot link directly with the coastal castles. What are, however, of great and slightly exotic interest are the markedly Tudor Gothic features of Henry VIII's tower, most notably the four-centred arches of a late Perpendicular doorway and a similar window, and the three-light mulloned window which one might well see in hundreds of the simpler churches or manor houses up and down England.

Many streets in Tournai were severely bombed by the Germans in 1940, and much reconstruction has now been done. This has all, so it seems, been on strictly "conservative" lines, the results varying considerably in artistic effect. The Point des Troux, a medieval bridge which was built to carry the actual wall of the city across the river Scheldt, is a brilliantly satisfactory example of this technique. The side towers are still those of the Middle Ages, but the three arches which spanned the river had gone. They have been rebuilt exactly in the old manner and with their old silhouette, but raised up a few feet to allow better passage for the numerous river barges which give much life and character to the riverside districts in the very middle of Tournai.

In the streets or in the market place a few houses, of dates about 1630, had boldly fantastic gables with outlines well scrolled in the Baroque taste. More frequent were houses in the "Louis XIV" tradition, with projecting, heavily modillioned cornices which made them exactly equivalent to our "Wren" or "William and Mary" houses in England. Some of these old houses, in their two different idioms, survived the bombing; elsewhere the gaps have been conscientiously filled with a few modern copies of the old gables and also, more often, by buildings whose exteriors are only a slightly modified version of "Louis XIV", the cornices, indeed, with their touches of colour, are apt to be a little more freely treated than in the originals. The brickwork of the new houses and shops is beautifully sensitive, and the general effect of this wholesale "restoration" is agreeable if sterile; it may even be thought better than the third-rate "contemporary" which might have been put up. But where the virtual refashioning of a whole city centre is involved the policy followed here at Tournai seems unenterprizing though undeniably seemly.

Architect: DAVID GRAY

Electrical Consultant: PETER JAY

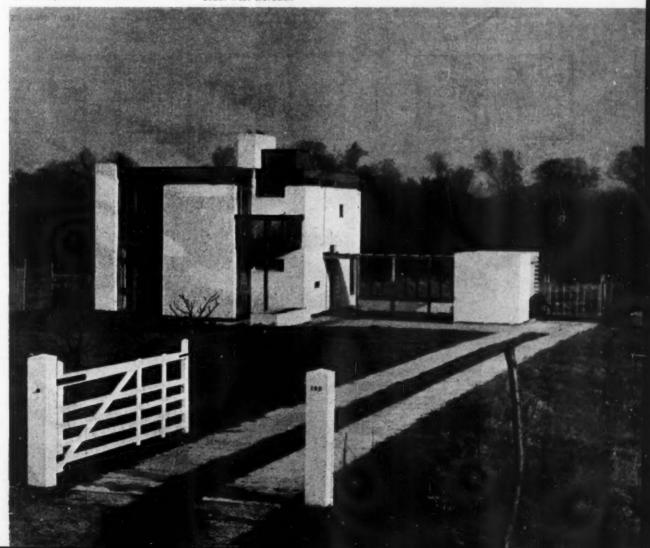
THIS is a two-storied, three-bedroomed house for a fisheries research scientist and his wife. It is built just outside Lowestoft and the local authorities raised no planning objection to it. It is little more than 1,000 sq ft in area and it cost slightly over £3,500.

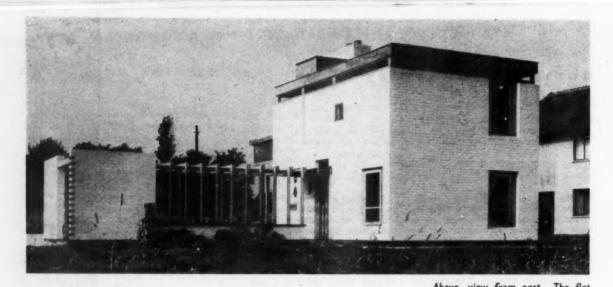
The interior is planned so that the windows of the main rooms look down the length of the site and do not overlook the gardens of the houses on either side.

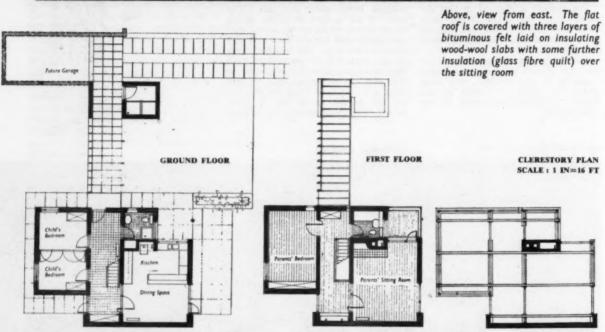
The rooms for the parents are on the first floor and are not easily accessible to the children, who have plenty of space for their games, friends, untidiness and noise, on the ground floor. The large kitchen and dining space on the ground floor has a 4ft 6in high counter, which screens the working part from the dining table. This arrangement has the advantage that when the children are smaller they can play happily in the dining part, in sight and sound of their mother, but without being under her feet. The door of the garden from the dining space allows meals to be served outside easily and the children may run freely in and out. The two bedrooms on the ground floor are divided by a floor-to-ceiling birch-faced screen so that they can be thrown into one and used as a playroom when the children are old enough to be left by themselves. The cloakroom, which is fitted

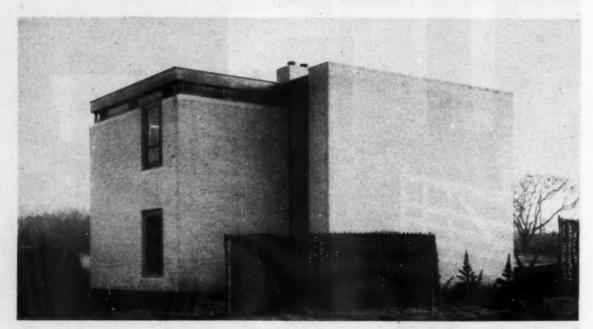


South-west elevation









with a shower, acts as a second bathroom. Instead of a shower tray, there is a tiled recess sunk into the floor.

The first floor is, in effect, a suite for the parents. They have their own large sitting-room, which opens on to a south-facing balcony, and their bedroom and bathroom. The large landing is fitted with bookshelves and can be used for reading or working. The fireplace has a high hearth so that this area is not dead space, as is usually the case when the fire is not alight, but is useful as a low bench to table all the year round.

or table all the year round.

The plan form has a vertical relationship: by grouping the bedrooms over each other, both rooms get morning sunshine and there is no problem of noise from either floor disturbing parents or children. Similar advantages apply to planning the two living rooms on top of each other (they both get afternoon sunshine and look down the long front garden). The bathroom is over the downstairs cloakroom, which is next to the kitchen, so plumbing and drainage are economically grouped.

conomically grouped.

The vertical relationship has, as well as planning advantages, structural advantages. Walls, main windows and so on are in the same vertical position on both floors.

The house is made of bricks and wood. Cavity walls are brick throughout and left unplastered but painted with white emulsion paint. The cavity is unventilated to improve the insulation value of the wall. All internal walls are load-bearing and are of 9in brickwork. The clerestory lighting on inside and outside walls, the floor-to-ceiling windows and the glazed partitions between the living rooms and circulation spaces allow sunlight to pervade the entire house and to be reflected off the white ceilings and walls; they also give an impression of the extent of the house liven entering.

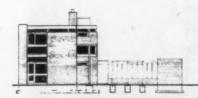
upon entering.

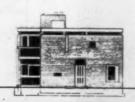
An Ideal Neo-Classic solid fuel boiler in the kitchen provides hot water, heats the towel rail in the bathroom and three radiators—one in the dining-kitchen, one in the sitting room and one in the hall—so that the warm air circulates into the upper landing. Bedrooms are heated by electricity.

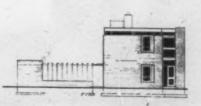


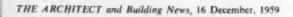


Top, the parents' sitting room. Below, the kitchen. The joinery is mostly of Columbian pine. It is sturdily designed and, to exploit colour and graining, varnished inside and out. The sitting room floor is tongued and grooved boarding sealed with Bourne Gleem

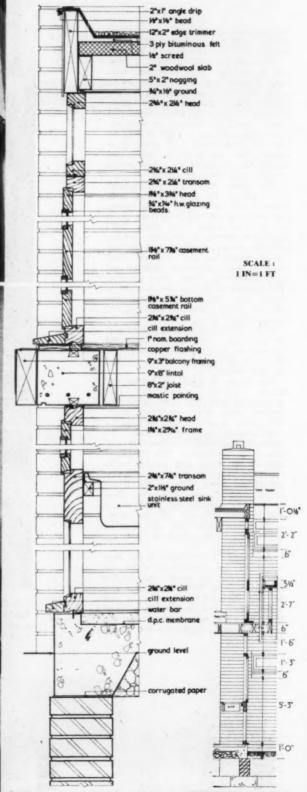


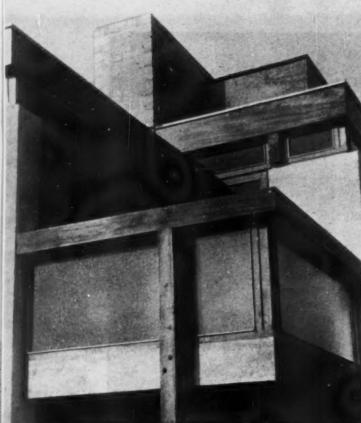


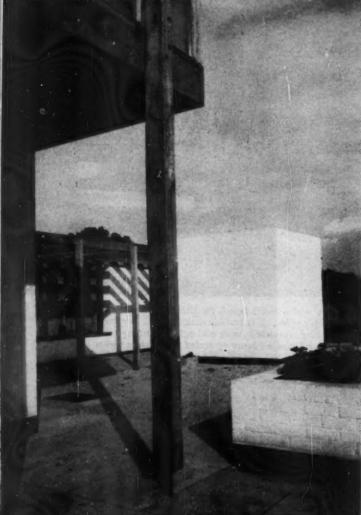


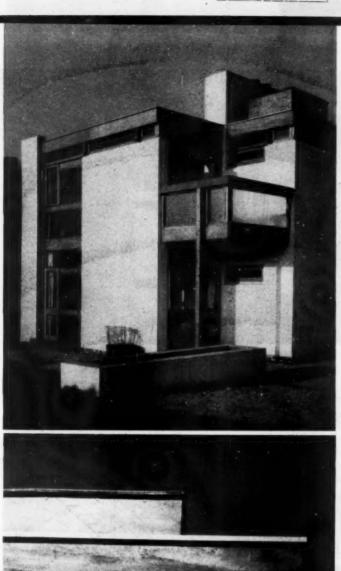


The details of the house can be grouped under two general headings: the "window-wall", shown below, and the "windows-in-wall" shown on the facing page





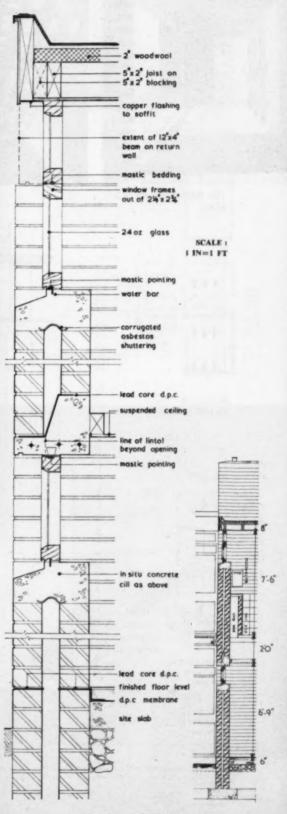


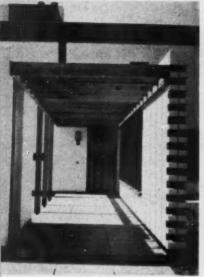






The detail section through the house showing the "windows-in-wall" condition. The cavity walls are of brick throughout and left unplastered but painted with white emulsion paint

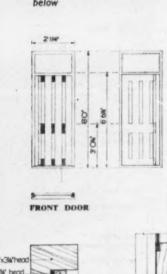


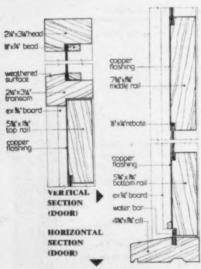


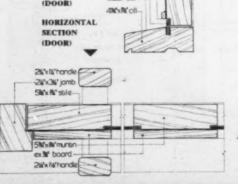
The front door, see details below

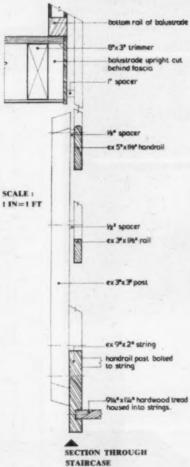


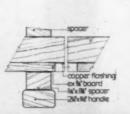
The staircase, looking towards the front door, see details below

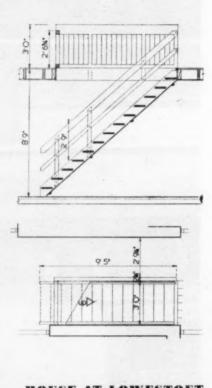






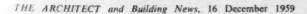






General Contractors: HARVEY & LEECH LTD.

Sub-contractors and suppliers:
Colourwash, Paints and Distempers: Virretex. Electrical
Installation: Mann Egercon. Felt Roofing: Bond &
Lacey. General Building Materials: Builders Direct
Supply: A Saul, Ironnongery: R. J. Pryce. Joinery:
H. R. Middleton. Linoleum: Catesbys. Plate Glass
and Glazing: Dysons. Sonitary Ware: Precasters.
Timber: Orfeur & Bellim. Varnish: Laycover.

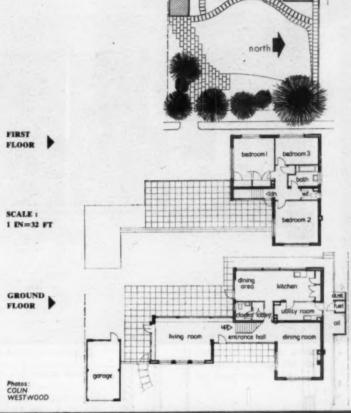


HOUSE AT LOUGHTON, ESSEX

Architect: G. F. BATEMAN

THE site is situated in a road which was developed before the war with large houses. The main design difficulty was to satisfy the client's demand for an imposing house to fill this large site. The accommodation asked for was unbalanced; a small first floor of basically three bedrooms and a ground floor with sitting room, dining room, kitchen and utility area. The architect attempted to satisfy the client's demands by siting the entrance hall and lounge to link up with the garage, so making the house long and impressive (frontage 85ft). The flat roof of the lounge and entrance hall is designed as a sun deck with access from the first-floor landing. The view to the rear is a panorama of Epping Forest.

The house from the east (road elevation)

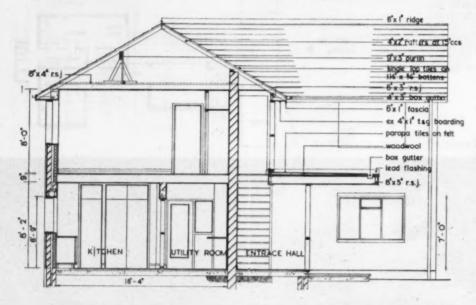


THE PERSON

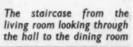




The front door, on the right there is the dining room and on the left the living room



EAST-WEST SECTION THROUGH HOUSE SCALE: 1 IN=8 FT





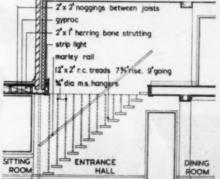
HOUSE AT LOUGHTON

The structure has normal strip foundations and a concrete floor slab. A woodblock finish is used in the lounge, entrance hall and dining room (Missanda). Thermoplastic tiles are used in the kitchen and cloakroom. Quarry tiles are used in the utility room. The walls are 11in cavity brickwork (machine-made, sand-faced). There is vertical cedar boarding on the rear elevation. The flat roof is covered with three-ply, mineral felt and lin cement screed divided into squares. The pitched roof is covered with hand-made pantiles. The staircase is made up of pre-cast concrete treads cantilevered from a 9in fairfaced brick wall. The treads are covered with cork and p.v.c. nosings.

Forced warm air from an oil-fired Waterbury air heater heats the house through ducts formed in the ground-floor slab, and the first-floor ducts run between the timber joists. All the rooms are served by warm-air outlets.

Hot water is provided by a 50-gal Sadia water heater, adjacent to the Waterbury heater in the utility room.

The staircase from the dining room looking through the hall to the living room



STAIRCASE DETAILS SCALE: 1 IN=8 FT

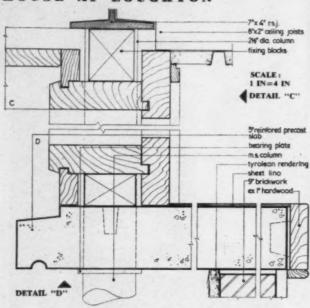
Below right, the kitchen with, on the right, the dining area

Below left, the living room with, in the back wall, the door on to the terrace with access under a covered way to the garage



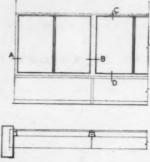
THE ARCHITECT and Building News, 16 December 1959

HOUSE AT LOUGHTON

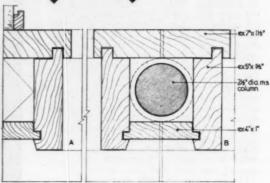


The house from the back garden. On the left, the kitchen and on the extreme right, the garage: in the centre there is the living room (single storey). The windows of this room are detailed above

The window surrounds on the garden side of the living room. The metal windows are vertical, centre-pivoted, fixed to a sub-frame



DETAIL "A" DETAIL "B"

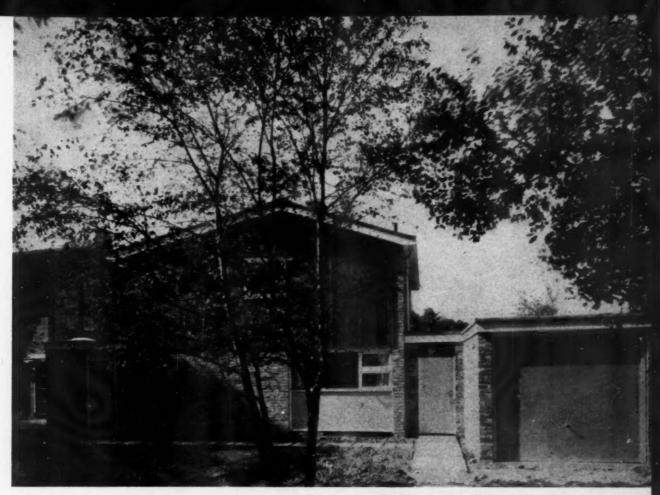


General Contractors: J. REYNOLDS (BUILDERS) LTD.

J. RETNOLDS (BUILDERS) LTD.

Sub-contractors and suppliers:
Doors: Flush Woodwork Ltd. Electrical: C. Stamp (Electrical) Ltd.
Flar Roof Finishes: Permanice Ltd. Floor Finishes: Hollis Bros. Heading: Advanced Heasing Ltd. Ironwork, Gates and Window Boxes and Staircase Balustrade: Clayton & Bamber (Waltham Abbey), Joinery and Fitments: A. H. Sansum. Metal Windows: Mellowes. Sanitary Ware and Ironmongery: Supplied by Client. Roof and Wall Tiling:
A. H. Herberts. Wallpapers: Sandersons & John Line. Vitroslab Panels: Plyglass Ltd.





The house from the road

HOUSE AT OXSHOTT, SURREY

Architects: BARTLETT AND GRAY

THE site on the Leatherhead road at Oxshott is one of the few remaining in the area. It possesses a certain amount of planting—young silver birches and so on—and the back of the site overlooks farm land.

silver birches and so on—and the back of the site overlooks farm land. The clients requested a three-bedroom house with an open ground-floor plan and the stair, if possible, leading from the main living area. The cost limit had to be below £4,000. The architects would have preferred, on the grounds of heat conservation, to have positioned the stairway off a separate entrance hall.

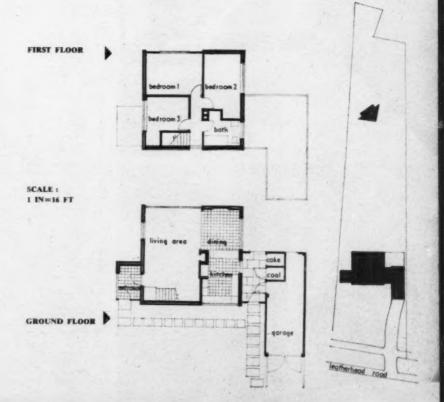
on the grounds of heat conservation, to have positioned the stairway off a separate entrance hall.

The plan is compact and the kitchen and bathroom grouped for economy in plumbing. No habitable rooms face north and the living area was designed to obtain sunlight at all times of the day.

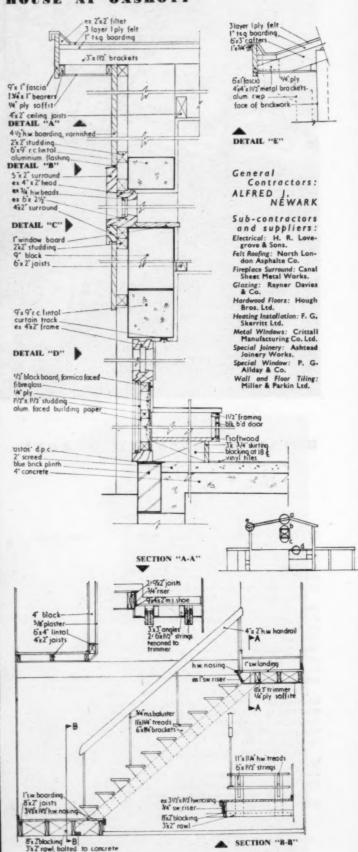
The structure consists of load-bearing brickwork. Solid ground floor (joist and boarded first floor).

The bricks are Wealdon Stocks.

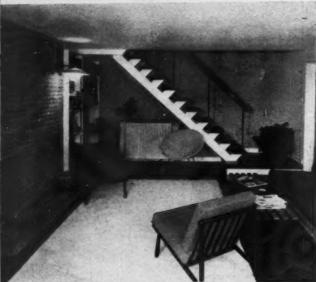
The roof is low pitched of wood with wool slabs on the rafters.











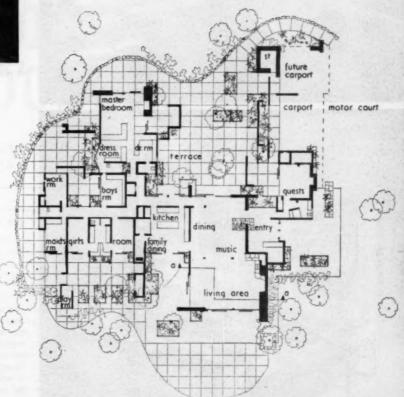


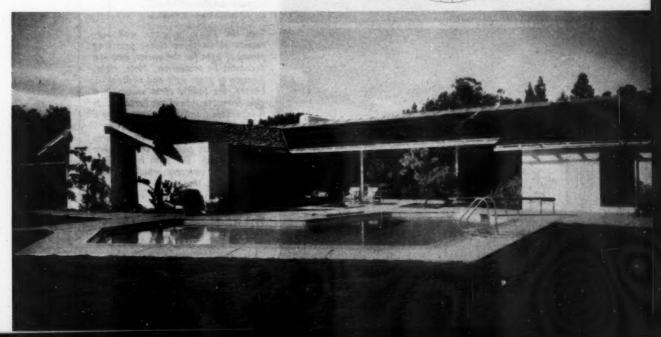


RANCH HOUSE IN CALIFORNIA

Architect: C. MAY

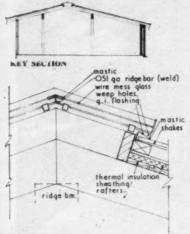
Above, the bathroom; the ceiling of rough texture and the lush plants give a kind of separation for the washing and the bathing areas. This house was built at Holinby Hills, California. The architect's intention was to keep the living spaces as open as possible. Low partitions separate the various parts of the plan. The dining area is separated from the family rooms by a large floor-to-ceiling fireplace. The kitchen and the dining area are divided by a "counter". Below, the overall view of the house with the octagon-shaped pool that is protected by the wings of the house. The living-area wing is on the left: the "corridor" is across the centre and the bedroom of the owner's son on the right







THE ARCHITECT and Building News, 16 December 1959



DETAIL OF SKYLIGHT



qi flash mastic qisa alum stop alum qiaze shakes qass rafters

THE VARIOUS GLAZING "CONDITIONS" IN THE BUILDING

The walls are open; a skylight ceiling runs along the length of the house and the living quarters are separated by low partitions. The patios and terraces are covered by pebbled concrete; the "corridor", facing the swimming pool, is made of natural materials and is lit by luminous shell lights swinging at various heights

Top, the studio, a glass wall surrounds it on three sides, providing plenty of light for the owner, who is a decorator by profession. Note, right, junction of glass wall and skylight Centre, the family room shown in a view from the side of the fireplace. It is separated from the "corridor" by a glass wall built from floor to ceiling Bottom, the front door is made of three antique Italian panels glued together and bleached. The path is made of pebblegrain concrete which is continued inside the house



RANCH HOUSE IN CALIFORNIA

MARRIOTTS OF THE MIDLANDS report on

EMERGENCY BUILDING FOR INDUSTRY

40,000 sq. ft. factory being built in 26 weeks

ARCHITECTS: Sir John Brown, A. E. Henson & Partners

The Northampton factory of Messrs. Giesen & Wolff Ltd. was destroyed by fire on the 8th August last. Within two weeks negotiations on a six figure contract for a new 40,000 sq. ft. factory, plus 9,000 sq. ft. of office space, were completed, and work on the site started on the 1st September.

These facts speak for themselves. Underlying them is the remarkable efficiency of the Marriott organisation, which has the capacity and flexibility to negotiate, plan and start building with the minimum delay.

The new factory will be completed in mid-March — 26 weeks from the date work commenced. This statement is of itself a testimony to Marriott's integrity in committing themselves to a definite completion date at the very outset of a job, and is a tribute to the fine support of the sub-contractors. That Marriott's accomplish the work dead on time is today accepted as an established fact, based on the results of numerous high-speed projects carried out by Marriott's in the Midlands.

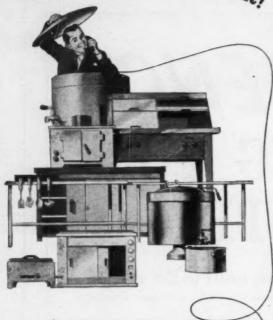
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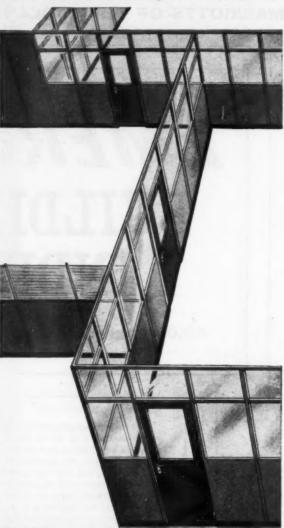
That's quite a familiar call to us. Whenever anybody has a catering equipment problem that needs expert advice and a pooling of ideas between the client and ourselves that's when we get that telephone call. And not without good reason either. In canteens, hospitals, large restaurants, hotels, factories, ocean liners, cafes-anywhere where preparing food is the object of the exercise-Crittall Aquafont have come up with the right answer to the problem. We manufacture a wide range of heavy and light duty kitchen equipment-but we also have a team of technical representatives whose job is to advise you. If they think that our equipment is not right for the job they'll tell you so -but such an occasion only arises very rarely. Whenever objective planning and fresh ideas are needed. just pick up that phone and say "Get me Crittall Aquafont."

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Information Digest

OFFICIAL PUBLICATIONS

British Standard Specifications, from British Standards Institution, British Standards House, 2 Park Street, London, W.I. Telephone: MAYfair 9000.

B.S. 219: 1959. Soft Solders. Price 4s, plus postage.

B.S. 1187: 1959. Wood Blocks for Floors. Price 4s, plus postage.

B.S. 1251: Parts 1, 2 and 3: 1959. Fire Backs, Surrounds and Hearths, Adjustable Throat Restrictors. Prices: Part 1: 4s, Parts 2 and 3: 3s, all plus postage.

B.S. 1334: 1959. Preformed Thermal Insulating Materials for pipes. Price 6s, plus postage.

B.S. 3139: 1959. High Strength Friction Grip Bolts. Part 1: General Grade Bolts. Price 7s 6d, plus postage.

B.S. 3148: 1959. Tests for Water for making Concrete. Price 3s, plus postage.

B.S. 219—a revision of the 1949 edition—now includes 14 grades of soft solder and three for higher temperatures previously referred to in an appendix. The additions are not all new, some having been included in earlier editions, although excluded from that of 1949. Rosincored solder, previously covered by B.S. 441, is now in B.S. 219. A non-antimonial solder is added. The uses for which the solders are designed are listed.

for which the solders are designed are listed.

B.S. 1187 is a revision of the issue of 1944 and in view of the very great increase in choice which has been available in the last ten years it might be considered overdue, but the basic considerations have not changed greatly. Parquet-type floorings are not included, the B.S. allowing blocks having dimensions of Hin minimum by 34in maximum and between 6in and 15in in length. Both hardwoods and softwoods are accepted and recommendations made for moisture content in relation to the method of heating the building. These range from 8 per cent to 18 per cent. An appendix quotes the F.P.R.L. recommendations of species to be used for various forms of traffic.

B.S. 1251 is in three parts, obtainable separately. Part 1 (4s) gives dimensional and constructional requirements for firebricks for 14in, 16in and 18in widths. Part 2 (3s) concerns metal, tiled and other surrounds for similar openings. Construction is covered by requirements for slabbing mix, bond for tiles, cement aggregate, reinforcement and protection from frost. Installation methods are also specified. Part 3 (3s) specifies design and performance tests for adjustable chimney-throat restrictors (insertible) for similar widths of fire openings. This requires a "test chimney", in which a lighted fire must not emit smoke into the room during the test period. What is of real interest, of course, is by what proportion the air of the room entering the flue is reduced after the flue has warmed up, due to the closing down of the restrictor.

B.S. 1334 is for pipe insulation for hot or cold liquids. As insulation values of materials differ, so do the recommended thicknesses. Losses are given for bare surfaces together with values per ft run. Where the system requires special consideration, recommendations for arriving at economic thickness are given.

arriving at economic thickness are given.

B.S. 3139 is also issued in parts, only Part 1 being available at present. It is for general grade bolts for use as friction-grip bolts for structural engineering. These are in fact high-tensile steel bolts, to be used with high-tensile steel nuts and hardened steel washers. Their use is to clamp the bearing faces of structural members so tightly together as to transfer the loads directly and not by shear on the bolts.

B.S. 3148 gives tests to be carried out on one gallon quantities of water, one being the water proposed to be used while the second is distilled water to act as a control.

Both are used separately to make test cubes and the setting times and compressive strengths are compared. In the appendix, which notes that water from natural sources may contain clay and undesirable chemicals, it is recommended that prolongation of the setting time by up to 30min and compression strength to 80 per cent of the control cube strength are acceptable.

Dampness in Buildings, M.O.W. Advisory Leaflet No. 47. Setting Out on Site. M.O.W. Advisory Leaflet No. 48. H.M.S.O., York House, Kingsway, W.C.2. Price 4d each.

Leaflet No. 47 declares that dampness is the builder's worst enemy. The causes of dampness are then given, with condensation as one of the three possibilities, the others being due to poor structural design or failure of material. The leaflets unfold to large sheets (11 in by 16½in) where the symptons are listed and possible causes and treatments set out opposite. The information is not highly technical, presumably because a builder will know the detailed action needed.

Leaflet No. 48 is again a builder's guide. It illustrates builders' squares, boning rods, water level and levelling with line or straightedge and level and squaring by tape.

■ Temperature and Comfort of the Human Foot. Paper No. 5.
Effect of Moisture Content on Tile/Mortar Bond. Paper No. 7. Commonwealth Scientific and Industrial Research Organisation, Division of Building Research, Australia, 1959.

Paper No. 5 involved getting 17 people to take part in tests in which various temperatures 1in and 30in above floor were tried, with the object of confirming, if possible, the theory that if the feet are comfortable the whole body will be—something of a generalization of the theory which was to be proved.

The floor was warmed or cooled by embedded pipes which gave floor temperatures ranging from 60 deg to 80 deg F, while the subjects ranged in age from the first decade to the sixth—precise ages are not given. In no case was a temperature below 69-8 deg F considered comfortable, the highest choice being 88 deg F. It has been deduced that the correct situation for room thermostats is near the floor. The results appear to support the claims of floor-warming advocates.

Paper No. 7 is not less useful, as it casts doubt on the practice of soaking wall and floor tiles before fixing. The results of five experiments are given and it is significant that the strength of the bond of a glazed tile to a brick wall is much better where the tiles are not soaked. Another common practice, particularly where floor tiles are concerned, is to coat the back of the tile with neat This was tried out in experiment No. 5 cement grout. This was tried out in experiment No. 5 but did not produce significant results. Mortar mixes also varied, both 1:3 and 1:5 being tried and the water/cement ratios were changed. In addition, the brick wall faces were used both dry and wet. The results of the test are that no advantage is derived from wetting the brick wall, nor from saturating the tile, while a 1:3 mix used direct on a tile appeared to give the best results. What is diconcerting about this paper is that there is no reference to any backing coat of cement render on the wall. seems likely that the absorbency of the normal backing coat must be greater than on many clay bricks (but possibly less than with sand-limes) so would draw out moisture from the tile bedding very rapidly. It may be a matter of procedure which would give the best tiling; if the back of the dry tile were buttered with a not-to-dry 1:3 mortar and applied to the render coat, the suction of the tile would probably be satisfied before the remaining water was absorbed into the rendering. This presumably could not be so much as to stop hydration of the cement.

Information Digest (continued)

 Annual Report of the Rural Industries Bureau. Rural Industries Bureau, 35 Camp Road, Wimbledon Common, London, S.W.19.

The wide range of interests and worthwhile results of the bureau's work are indicated in this report. It is not concerned with "cottage industry" but with larger fry whose continued or improved economy as industrial units are of value to the local country. Its index lists engineering, woodworking, clay industries, saddlery, thatching, wrought ironwork, underwood, basketry, Welsh woollen industry and the bureau's costing service and marketing service.

A survey conducted in 1957 discloses the existence of many country workshops doing a surprising range of work, not only for home consumption, but having also a useful export trade. The engineering side alone has examples from deep-drawn press work to steel-framed buildings. Advice is given as to suitable machinery and instruction in techniques, repair and overhaul of The bureau's own instructors travel around machinery. to give demonstrations to groups of craftsmen who "live-in" for the period of the course. The bureau also has its experimental workshop for the benefit of the small business, over fifty projects having been undertaken by it during the year under review. These are explored for any and all trades where the cost of the experimentation would be too great or too technical for the inquiring firm. Traditional materials are by no means a limitation—
P.V.C. and plastics foam—and any others of the newer materials are likely to be employed, as in the creation of an epoxy resin/glass fibre P.V.C. foam cored dinghy.

While underwood may appear an unpromising field, the bureau was able to show that there was an unsatisfied

demand for horticultural stakes, brooms and besoms, to the benefit of woodland interests.

Basketry also seems a limited field but here the bureau performed several functions—as advertiser for a trade unable to bear the expense, as market research organization and as technical investigator in determining the best

way of drying willow canes artificially.

It is apparent that the bureau is doing excellent work on its Governmental mandate. The bureau is under the chairmanship of Sir Basil Mayhew, K.B.E., F.C.A., and five other trustees, while a large council, chaired by Mr. A. T. A. Dobson, C.B., C.V.O., C.B.E., includes many wellknown names but not many architects. Of the consultants, Mr. Edward Barnsley, C.B.E., is the furniture expert and Mr. J. M. Knowles, F.R.I.B.A., advises on professional aspects.

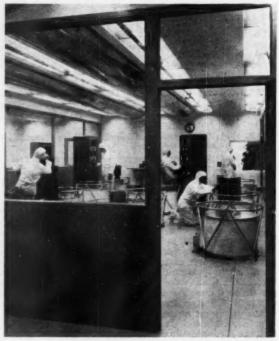
A number of technical works have been written for the industries in which the bureau is interested. These are listed at the back of the report.

TRADE ASSOCIATION PUBLICATIONS

Coke-Burning Appliances Handbook. Price 35s.

Design and Performance of Natural Flue Terminations and Mechanically Assisted Systems. The Gas Council, I Grosvenor Place, London, S.W.I. Telephone: SLOane 5136.

The handbook is in loose-leaf form of considerable The handbook is in loose-leaf form of considerable bulk, as it lists every approved appliance made, except for whole-house warming apparatus. These include details as to heat service, fuel capacity, weight, boiler type or material and output and all installation dimensions. The handbook is in sections dealing with open fires, open fires with boilers, open fires with large boilers, heating stoves (also known as openable stoves), heating stoves with boilers, combination grates with boilers, demestic hoilers, and lastly small central heating boilers, boilers domestic boilers and, lastly, small central heating boilers.



Special clothing must be worn in the testing section of the new Ferranti laboratory in Edinburgh. The laboratory, which cost £150,000, is a dust and vibration free room, designed for the manufacture of navigational system components for aircraft, missiles and submarines

Two points call for comment. One is the very large number of makes of appliances which have very similar purposes and efficiencies: it must be quite uneconomic to market and make available replacements for such a large number of makes. The other is that the illustrations of some tend to take away interest in any technical merits they have. For example, the open fires are shown by photograph in tiled or faience surrounds of low quality of design. Similarly with heating stoves: some designs are out of date in appearance. It says a great deal for the designers that the efficiencies have been so high, for so long, but how do they imagine the appearance fits in with good, simple furniture to-day? It might be a useful move for the Gas Council to suggest to makers that they obtain a certificate of the Council of Industrial Design for all products to be illustrated in the handbook commencing in about 1961.

The second publication of the Gas Council received is an advance copy of papers read at the 25th Autumn Reseach Meeting of The Institution of Gas Engineers, held in November. The information is highly technical but essential to understanding of the principles of flue efficiency. The publication is illustrated by many graphs, some photographs of flue terminals tested and a diagram showing "sealed" appliances on a mechanical extraction system suitable for multi-storey buildings. In addition to vertical terminal and horizontal terminal flues, natural and mechanical extractor draught flues, references are made to induced draught arrangements. The conference will be reported in full in the Transactions of the Institution of Gas Engineers and will also be published by the Gas

ELECTRIC FLOOR-WARMING

1



Graiseley Estate, Wolverhampton · Designed by the Architects of the Borough Engineer's Department.

Electrical contractor · Williams Brothers (Electrical) Ltd.

Electric floor-warming simplifies planning in 599 apartments in five different-size buildings

Ideal comfort heating Each apartment on this all-electric estate of 2, 3 and 8 storey flats, and 4 storey maisonettes, has a 'withdrawable' system of electric floor-warming installed in the living room, kitchen and hall, designed to give constant background warmth. Supplementary heating is provided by 2 kW panel fires in the living rooms.

Planning is simplified Inside the apartment: complete elimination of fireplaces, flues, and chimney breasts. No radiators or pipes mar the rooms. Outside the apartment: no boilerhouse, chimneys, fuel stores, pipe trenches, or fuel storage spaces. These features make electric floor-warming attractive from the housing authority's point of view.

Economy Electric floor-warming is cheap to install, economical to run. It uses cheap 'off-peak' electricity; is tenant controlled. It is popular with tenants who appreciate comfort at reasonable cost.

No labour involved All chores connected with fuel handling are done away with. No fuel is needed in the apartment or on the site. There is less work for the housewife, and no need for boiler-room staff. Here then is an estate, an all-electric estate, where electricity supplies not only the water heating, cooking, lighting and all the power requirements of the tenants, but the space heating as well.

On the Graiseley Estate, they chose electric floorwarming. Now the tenants are reaping the benefits.

If you are thinking of installing electric floor warming, ask your Electricity Board for details.



With all Good

Wishes for

Christmas

and the New Year



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Information Digest (continued)

Solid Fuel Appliances: Amendments, September, 1959.
 Coal Utilisation Council, 3 Upper Belgrave Street, London, S.W.1.

The amendments to the annual list, of which No. 16 is the current one but due to be succeeded by No. 17 early in 1960, consist of a large number of additions and a few deletions, so it would appear that the very wide and possibly unnecessary range of appliances is not yet affected by the "three S's"—standardization, simplification and selection, urged on us by Unesco.

Electric Floor Warming. Electrical Development Association, 2 Savoy Hill, London, W.C.2.

This is a small booklet which is non-technical propaganda for floor heating. After listing the advantages, an estimate of cost of installation is given as about 3s 6d per sq ft of floor warmed, while running costs are given as about £68 per annum. There is also a list of warming costs as recorded at a number of places in the U.K., supplemented by open fires in a few cases. The booklet does not say that in the average house the upper floors cannot economically be warmed by the same system.

Magnesium Oxychloride Flooring. The Jointless (Oxychloride) Flooring Association, 69 Cannon Street, London, E.C.4.

This is a two-sheet publication by an old-established association dealing with a flooring material that has very probably lost many users in the last twenty years through the need to use the cheapest floorings for housing work. The association seeks to ensure that the materials and laying of the floors are good and efficient. The constituents are caustic calcined magnesia, fillers such as talc, asbestos and woodflour and fine aggregates such as crushed stone, silica and other inert materials. By adjusting the proportions the finish, hardness and strength may be varied according to requirements. While there are five standard colours, these can be extended to include black, white, blue and green. One point not emphasized and which is said to have cost one Development Corporation a lot of money is the corrosive action of this kind of floor on steel—a practical point usually easily catered for by wrapping pipes with felt or paper. The usual thickness in one-coat flooring is ½in to ½in and in two-coat work ½in minimum. It can also be used in its cheaper form as under-layment for rubber and linoleum floor coverings.

 The Choice is Yours. Clay Products Technical Bureau^{*} Drayton House, 30 Gordon Street, London, W.C.I.

This booklet, described as a practical guide for the potential house purchaser, deals with bricks, roofing, tiles, flooring tiles and sanitary ware. Some private houses are illustrated by photographs of the elevations, but none is a good example of modern brickwork. Not that the bureau is unaware that some exist, for in a mosaic of details one finds modern examples of parts of buildings. Four photographs of brick bond are shown. These are in such close detail that the mass effect cannot be seen and as the quoins are not included the point of the difference between Dutch and what is described as "(Old) English" is difficult to see. One feels strongly inclined to question the statement on page 5 where, in discussing external cavity walls, they say that the inner leaf "is sometimes constructed of other—and less substantial—material, the main object being to reduce costs". What does this mean? How many architects know to their sorrow that the inner skin in no-fines concrete, clinker and lightweight (aerated) concrete blocks, although often costing per yard super unfixed less than common bricks, are often costed at prohibitive rates. Had the bureau pressed the

claims of clay partition blocks and cellular bricks it would have been batting on a better wicket.

On the subject of roofs, the photographs are mainly of the older type of roofs and hipped dormers. A diagram shows a mansard roof, a hipped roof and a compound section of a roof having both low pitch and "steep pitch" ridge roofs. Only the latter is described as being suitable for tiling. There is no indication of pitch, yet it would have been so easy to have suggested a minimum of 30 deg (pace Marley!).

In other matters this production is good, enlivened with

some light-hearted cartoons.

 A Review of the Laminated Timber Industry in Western Europe. Price 3s 6d.

Design in Timber. Free. Timber Development Association Ltd., 21 College Hill, London, E.C.4.

The Review of the Laminated Timber Industry has been written by the chief architect to the T.D.A., E. Levin, A.R.I.B.A., following a tour which took in the study of

production methods and markets.

Mr. Levin notes that Germany has the credit for developing the industry, yet today is apparently the least active. A resurgence of interest is now observable and this will be aided by the investigations and collaboration of Stuttgart Institute. One point of very considerable importance reported is that some of the failures of glued structures had been traced to the destructive effect of acid hardeners on the wood fibres. This has resulted in strict control on the production of glued components and structures. Licences are granted to firms according to their technical equipment, personnel and heated premises.

By contrast with Germany, Switzerland appears to have adopted laminated construction as a general form of construction, not only by large firms but by woodworkers, saw-millers and carpenters generally, yet it is not a mass-

production industry.

The conditioning of timber was also examined and the acceptable moisture contents for a number of conditions of use are reported. Air-drying down to 18 per cent to 20 per cent is customary, followed by kiln-drying down to whatever level the particular use demands. Generally 12 per cent to 14 per cent was desirable but in one large factory only 1 per cent difference was allowed. Another factory used the wood at 15 per cent to 18 per cent for most purposes and by choice for external construction, but 10 per cent to 15 per cent for internal construction, the actual figure depending on the level of heating in the place of use. Even 8 per cent to 10 per cent was advocated for well-heated buildings.

As regards species of wood, Belgium preferred Baltic Redwood, in Switzerland local and Austrian timbers, while in Holland spruce was used almost exclusively in

laminated work but fir or pine for some jobs.

Thickness of laminations varied from \$\frac{1}{4}\$ in to \$1\$ in while lengths were generally up to 5 or 6 metres. Widths are about \$5\$ in or \$6\$ in, wide members being built up of side-by-side members.

Glues used in Europe are mainly urea-formaldehyde with some phenolic and resorcinol, the latter little used because of its high cost, although commonly used in the

U.S.

"Design in Timber" illustrates by photographs and constructional drawings a number of examples of outstanding work in Europe and elsewhere. Many are taken from the Brussels Exhibition and serve to indicate the resourcefulness of the many architects engaged on its buildings. Domes, stressed skin slabs, laminated frames, open frames and—inevitably—hyperbolic paraboloids are shown. That there are so many examples of unconventional construction applied to commercial and industrial uses is indicative of the competitive quality of the cost of timber as a structural material.

Information Digest (continued)

TRADE PUBLICATIONS

The Simms C-DA System. W. J. Simms Sons & Cooke Ltd., Haydn Road, Sherwood, Nottingham.

The joinery department of this well-known firm has designed a simple but versatile system of prefabricated timber building which enables that department, in collaboration with the general contracting side, to offer complete buildings from foundations to services. The timber system consists of units of either 6ft 4in or 6ft 8in width which set the planning modules. External panels, faced either with W. R. Cedar or 1 in phenolic resin-bonded plywood, are tongued and bolted to each other, the abutting posts being approximately 4in by 41in. Variations in this construction enable buildings of one, two and three storeys to be provided.

Roof construction relies on glued plywood beams up to 28ft 6in span, the depth being 16in. Spans for assembly halls and similar large spaces up to 40ft width are of box section of depth to suit the span. Corridor spans, 6ft 4in and 6ft 8in, have solid wood beams. Over these are laid Stramit panels finished with roofing felt. In view of the note earlier in this column on glues used on the Continent it is of interest that the C-DA system relies on resorcinol glues.

The brochure describes the system and trimmings clearly and presents the information and illustrations in an attractive form to lay clients. The company makes the point that they have long made it their practice to offer an "all-in" service and for this reason employ their own architectural, engineering and surveying staff.

Colour in Buildings. The Walpamur Co. Ltd., Walpamur Works, Darwen, Lancs.

Here is a useful guide for use in preparing Schedules of Decorations. The information is perhaps not new but it is a helpful recasting based on the use of colours recommended in the Ministry of Education's Bulletin No. 9, "Colour in Schools." The book was written by Mr. A. E. Hurst, F.R.S.A., F.I.B.D., of the firm's design department and was illustrated by Mr. R. Ball of the same department. Copies of the book are in limited supply so are being distributed, to those interested, by the firm's representatives.

 Hope's Patent Glazing. Henry Hope & Sons Ltd., Smethwick, Birmingham.

This new catalogue gives in much clear detail all that a draughtsman can need in detailing patent glazing and lantern lights. Details are shown to full size, half and quarter full size, lead-clothed bars coloured blue and aluminium sections in green. Single and double glazed roof details are given and fixing positions. Spans of bars and sizes of glass sheets are included.

Vertical patent glazing is also detailed, showing very neat arrangements, some having ranges of opening lights.

The re-issue of this catalogue is welcome as regards the extremely useful information it contains but it is a pity the size is 15in by 10in. This is remote from any recognized documentation size and really makes filing in a system a problem.

 "Ejecta" Wall Tiles. James Halstead Limited, Crow Oak Works, Whitefield, Manchester.

A display of these tiles was exhibited at the recent Building Trades Exhibition and a board folder of samples is made available. The tiles all have rounded or cushion edges and are in six sizes from 6in by 6in to 4in by $\frac{2}{3}$ in.

Plain, marbled and opalescent colours are available, the plain colours, from white to black, numbering ten. These tiles have a high gloss and are fixed by adhesive but there is no indication of what sort of base the adhesive should be applied to in the folder, but a loose leaflet says that any dry, sound, reasonably flat surface is suitable. They are claimed to be proof against steam and water. One curious thing about the folder is that the maker's name and address appear nowhere, but this omission does not apply to literature on their Ejecta stair treads, vinyl flooring and vinyl flooring accessories.

CATALOGUES

 Linoleum. The Linoleum Manufacuturing Co. Ltd., 6 Old Bailey, London, E.C.4.

Staines "Colourama" linoleum is illustrated in a range of colour patterns. The "Conquest" series is composed of square units, each divided into four sections of differing colour or shade, the unit pattern being repeated across the width and in the length of the flooring. The "Inlaid" series resembles a carpet pattern with interweaving flowing lines of one colour contrasting with the ground colour which is enlivened by vari-coloured flecks.

 Industrial Flooring. Metarock Ltd., I Sloane Square, London, S.W.I.

A new edition has been issued of this company's brochure dealing with their concrete hardener and water-proofer for use in dustless monolithic floors of cement and sand and granolithic cement. A list of users shows the material to have been used on important contracts.

 Mobile Pumps and Concrete Mixers. Ransomes & Rapier Ltd., 32 Victoria Street, London, S.W.I.

A new pamphlet has been published which describes this manufacturer's horizontal drum truck mixers, high-discharge truck mixers and tilting agitators. The same pamphlet gives details of their self-priming water pumps of nine capacities and of tilting and non-tilting mixers.

 Ceilings. Celotex Ltd., North Circular Road, Stonebridge Park, London, N.W.10.

This manufacturer has issued a pamphlet on their decorated suspended ceiling which employs their ‡in thickness natural or "highlight" finish boards in 24in squares. These are grooved in their edges to receive cold rolled tees, stem upwards. By bevelling the exposed edges and slightly recessing or rebating the edges coming above the tees, the panels can be tightly butted, completely hiding the tee supports.

Gas Heating. F. A. Borchardt Ltd., 506 High Road, Chiswick, London, W.4.

This small catalogue deals mainly with the DRUgasar Heaters which in domestic form are enclosed in sheet and woven steel cabinets. These are balanced flue gas space heaters with magneto ignition and flame protection controls. Output ranges from 7,500 B.Th.U. to 57,000 B.Th.U. There is also a wall-mounted pattern for commercial and domestic use having an output of 7,500 B.Th.U. Another product is a free-standing solid-fuel heater with a claimed efficiency of 80 per cent, suitable for rooms up to 4,000 cu ft capacity. It is a closed stove with a heat-resisting glass window.

Mr. Brennand pays £68.13.1d. a year for "all the heating and hot water we could wish for"

Just over two years ago, Mr. R. O. Brennand had a 'Potterton' DOA Series Oil-Fired Boiler installed in his 4-bedroom house at Bushey, Hertfordshire. So happy is he with the boiler's running costs, that he wrote and told us about them. We quote from Mr. Brennand's letter:

"I have kept the record of the oil consumption as carefully as I can," he says. "We have certainly had all the heating and hot water we could wish for. I have calculated the cost of the oil at . . . £68.13s.1d. for the year to 25th March 1959. These figures are far less than I had bargained for, and I regard them as very reasonable."

The boiler was delivered to the site as a complete packaged unit, right down to the last nut and washer. From that day to this, Mr. Brennand's 'Potterton' Boiler - automatic as the sunrise - has never been a spot of bother and never will, due to a Planned Maintenance Service. Mr. Brennand is a very satisfied customer, and typical of 'Potterton' Boiler owners everywhere. To these people, Mr. Brennand's running costs come as no surprise. Nor to anyone else who knows the vast difference in thermal efficiency between a converted boiler and a 'Potterton' Oil-Fired Boiler, designed for the fuel it uses and nothing else.

Clean, quiet and automatic-Mr. Brennand's 'Potterton' Oil-Fired Boiler at work





'POTTERTON' Oil-Fired BOILERS

the Key to comfort





Mr. Brennand's is a cavity-walled house, with double glazing to all windows and doors



Temperature is controlled at 70° in the two main living rooms

DESIGN OF THE HOUSE It is a cavity-walled house, the inside skin being of Thermalite blocks. First floor ceilings are insulated with fibre glass in the loft. There is double glazing to all windows and doors. A separate lounge, dining room, kitchen, larder and cloakroom occupy the ground floor; four bedrooms and a bathroom occupy the first floor. Area of the house is 1,962 sq. ft.

Architect: Robert Neil, A.R.I.B.A., Dawe, Carter & Partners. Builder: S. & K. Darvill Ltd.

INSTALLING THE HEATING SYSTEM All 7 roomsplus the hall landing and downstairs cloakroom have radiators. A small radiator (10 sq. ft.) is also in the linen cupboard and a towel rail is in the bathroom The radiators have a total heating surface of 318 sq. ft. Temperature is controlled at 70° in the two main living rooms, and 65° in the bedrooms. The boiler has an electric pump and a Venner Time Switch. Installing engineers: White, Bays & White Ltd.

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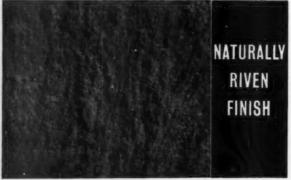
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Industrial Notes

- Charringtons, distributors of solid fuel and Mobilheat oil fuel, recently entertained about 160 guests to dinner at the Cafe Royal. Their guests were drawn from oil-burning boiler and burner manufacturers, heating engineers and other manufacturers of oil-burning equipment. The object of the gathering was to provide a joint get-together where differences opinion and other problems could be discussed. Mr. J. Charrington was in the chair and following dinner a lively discussion developed from which it appeared that the majority of those present were of the opinion that oil producers and distributors should provide more opportunities for the training of installation staff.
- From January 1, 1960, Mr. R. M. Bateman will relinquish the chairmanship and cease to be a director of Turners Asbestos Cement Co. Ltd., in order to devote his time wholly to the functions of deputy chairman of Turner & Newall Ltd. The new chairman of Turners Asbestos Cement Co. Ltd. will be Mr. K. Neve, who joined the board of Turner & Newall Ltd. last September.
- Henry Wilson & Co. Ltd. have reduced the prices of the three smaller models of the "Oilheat" range of boiler burner units. The costs of units with the square casing

- are now as follows: Model 80, £170 (previously £192), Model 118, £190 (previously £205) and Model 160, £225 (previously £240).
- A. Monk & Co. Ltd. show a profit of £588,621 for the year ended February 28, 1959, compared with £740,146 for the previous year. A final ordinary dividend of 16½ per cent has been proposed, bringing the total distribution for the year to 30 per cent, plus a bonus of five per cent.
- The London publicity office of the British Thomson-Houston Co. Ltd. is now located at Crown House, Aldwych, London, W.C.2 (telephone: Temple Bar 8040, Ext. 2).
- Crabtree Electrical Industries Ltd. show a group net profit of £222,752 for the year ended July 31, 1959, compared with £112,572 for the previous year. A final ordinary dividend of 12½ per cent has been proposed, making a total distribution for the year of 20 per cent.
- Expandite Ltd. have formed a new subsidiary company, Premier Bitumen & Asphalte Co. (1959) Ltd., of Bracknell, Berkshire. They will manufacture and market a range of bitumen compounds and other specialized products used in the build-

ing and civil engineering industrics. The patents and trade marks of Premier Bitumen & Asphalte Co. Ltd. (now in liquidation) have been purchased by the new company whose directors are Mr. T. Pooley (chairman), Mr. C. R. Warr, Mr. C. G. Tudor Pole, and Mr. J. Bowler Reed.

- Messrs. H. A. Vigar and J. R. D. Walker, respectively production manager and chief engineer of the Rugby Portland Cement Co. Ltd., have been appointed directors of its wholly owned subsidiary company, R.P.C. Technical Division Ltd.
- The directors of the Midland Iron & Hardware Company (Cradley Heath) Ltd. have been informed that certain stockholders have received a circular from a Mr. F. E. Scammell, in which he refers to a proposal for a bid for the ordinary stock units of the company. The directors are themselves shortly issuing a circular to all ordinary stockholders and in the meantime state that, at the present time, there is no offer for stockholders to consider.
- C. F. Casella & Co. Ltd. have disposed of their subsidiary company, Casella (Electronics) Ltd., to Cooke Troughton & Simms Ltd., a company of the Vickers Group. The main business of C. F. Casella & Co. Ltd. is in no way affected by this change.
- Sealocrete Products Ltd. have reduced the price of Sealocrete Water-proofing Supercoat as follows: 40/45 gallon barrels, 24s per gallon; five gallon drums, 25s per gallon, and one gallon tins, 29s per gallon.
- The directors of Tube Investments Ltd. are to recommend a final dividend of 12½ per cent for the year to July 31, 1959, making a total distribution of 20 per cent for the year. This is an increase of 2½ per cent on last year's figure.
- At the recent Annual General Meeting of the English Joinery Manufacturers' Association. Mr. W. R. Price, the president of the association suggested that a federation of British woodworking associations should be set up. Mr. Price emphasized that he was not advocating the disbandment of any trade association connected with the wood-working industry, and certainly E.J.M.A. would not think their interests adequately covered by complete absorption into a larger, all-embracing body.
- Mr. F. Why, an assistant director of Austins of East Ham Ltd., has now assumed responsibility for the Grangewood Partition Division of the Austin Hall Group of Companies. Mr. Why will, however, continue to act as public relations officer for Austins of East Ham Ltd.

Woking Council is experimenting with a new type of dustless refuse collection which is extensively used in Holland. They are using a vehicle which mechanically empties dustbins without spillage. New type dustbins with hinged lids are wheeled to the rear of the vehicle where they are mechanically tipped inside the collector



NEW PRODUCTS

In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer

New Decorative Glass Sheeting (A)

A new glass partition has been produced whose only supports are the outer framework and this without -limitation of the length of run. In fact, the only limitation is height but as the glass height can be up to 9ft 10in it is not likely to impose any great restriction. The partition relies upon the use of vertical sheeting known as Corroglaze Decorative Sheets. These sheets have a corrugated section with corrugations of approximately lin deep and spaced at 3in intervals, one surface being smooth and the other stippled. The glass panels form a series of butt joints which are filled with plastics cover strips forming an entirely translucent partition in which shadow forming supports are non-existent. They can be illuminated to improve the appearance. These sheets are supplied in 59in, 783in and 118in nominal lengths. Standard width is 32½in and the net cover, fixed, is 32¼in. They transmit 85 per cent light, are claimed to be non-combustible and to have a U value of 1.20. It is also claimed that they are virtually inert to atmospheric attack, will not discolour and maintain their light transmission co-efficient indefinitely. They should be found suitable for dividing up large offices, retail premises, showrooms, or warehouses into smaller areas and also for the provision of corridors. The sheets

can be used externally, but when this is done a centre supporting rail, suitably cushioned to help resist heavy wind pressure, should be provided. Prices range from £4 0s 6d to £3 9s 9d for the 59in lengths, £5 4s 9d to £4 10s 9d for the 78½in lengths, and £7 19s 0d to £6 19s 0d for the 118in lengths, depending upon quantity. The plastics cover strip for the side joints on vertical internal and external application is 1s 3d per ft.

Corroglaze Limited, Palace of Engineering, Wembley, Middlesex. Wembley 9411.

Readers' Information Service, Ref. A. Date 16/12/59.



New Electric Refrigerator (B)

The new 1960 English Electric table-top refrigerator has a capacity of 4 cu ft and has been designed for use in small kitchens. Features of the new model are the counter high working surface top and adjustable shelving which gives a choice of 20 basic arrangements and a possibility of 296 different storage patterns. The shelves are of the rod type, coated with plastic, which divide or reverse to give standing space for bottles and there are runners at five levels in the cabinet walls. Other new features are a large enclosed evaporator which gives a temperature needed

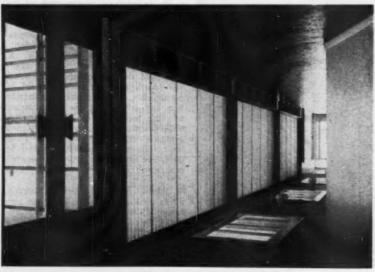


for keeping ice cream and frozen packet food; and a full-width lid covering the salad crisper also forms an extra shelf. Corners of the food compartment and door shelves are rounded and the salad bin, dairy keeper and a removable egg rack are made of clear plastic. Finish, white or cream with interior fittings and finish in shades of blue and gold. Overall dimensions 20½ in wide, by 22½ in deep by 36 in high. Price: £63 3s 0d.

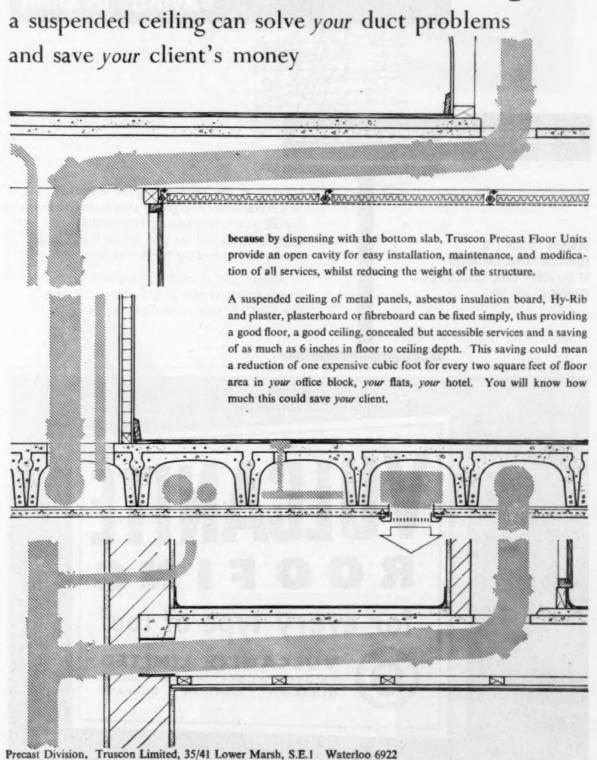
The English Electric Co. Ltd., Marconi House, Strand, London, W.C. 2. Covent Garden 1234. Readers' Information Service, Ref. B. Date 16/12/59.

New Passenger Lifts

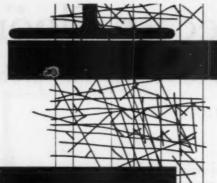
The new Duplex Econolift passenger lift has been specially designed for large type buildings and hotels with a great volume of traffic. It will serve five or six floors and is similar in appearance to two standard Econolifts side by side, each with its individual power unit but operating in a common well with interconnected collective control. The shaft space is only 6ft 6in by 3ft 6in, in other words a space normally occupied by a single lift but with the added safeguard that should one lift go temporarily out of service, the other lift is not necessarily affected. The capacity is three persons to each car and it has been assessed that 100 persons can be conveyed in half an hour with a waiting time between elevations of approximately 50 seconds. The control system is auto-matic with "up" and "down" push buttons on each intermediate landing and call buttons on the top and bottom floors. Pressure on a button is registered and dealt with in rotation, either lift travelling in the appropriate direction dealing immediately with the call. Instantaneous safety gear is incorporated on steel guides with overload motor protection. Doors are fitted with



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NEW PRODUCTS (continued)

prelocking electro-magnetic locks and the lift cannot open until the doors are positively closed and locked in position. Existing buildings can be fitted with the minimum of building work. Interior furnishing is in vinyl plastic with a choice of several attractive colours. Price: from £2,900 for the two lifts (delivered and fixed).

Pickerings Ltd., Globe Elevator Works, Stockton-on-Tees. Readers' Information Service.

Ref. C. Date 16/12/59.



The new Winget 14 NT/R all hydraulic reversing drum, non-tilt mixer has a mixed batch capacity of 1 cu yd. The machine is fitted with a built-in batch weigher and has an large capacity dragfeeding



shovel. Movements of the hopper are made under hydraulic power giving positive, non-slip finger tip control and trouble-free operation. The hopper has an angle of discharge of 55 ensuring quick charging of the drum. The special design of the hydraulic ram eliminates any possibility of damage to the weigher on its downward movement. All the mixer control levers-drum, water and hopper-can be grouped on the left hand or the right hand side of the machine as required, thus enabling one operator to work two mixers side by side when fed by the Winget Polybatcher. Water control is by means of a new type tank and positive action water valve which provides, when required, partial dis-charge of the measured volume of water before the dry batch is introduced into the mixing drum. The reversing action provides a powerful impetus which causes the mixture to

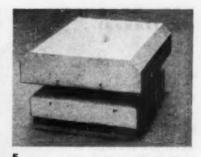
be discharged quickly without the necessity of scouring the drum. The 14 NT/R can be powered by either diesel or electric motor as required and can be easily loaded on the Winget Lolode Trailer. It is claimed that tests have proved that the new mixer will pro-duce dry mixes without balling; that the quality of the mix is uniformly high and with a shorter mixing time than usual. The machine has a dis-charge height of 4ft 6in so that it is capable of discharging into any type of normal placing equipment whether upright, roll-over, crane skips, dumpers, pneumatic placing hoppers, or the receiving boots of conveyors.

Winget Ltd., Rochester, Kent. Strood 7276.

Readers' Information Service, Ref. D. Date 16/12/59.

New Roofline Extractor (E)

The new Mechavent Roofline roofmounted extractor is designed to give economical and efficient power ventilation of all types of industrial build-This power extractor unit is of low overall height and is claimed to be weatherproof in all climatic conditions. Internal auto-shutters can be provided to prevent heat losses through the unit when the fan is not running and where powered intake ventilators are required, reversible motors are available. The units can be supplied in a range of sizes for either sloping or flat roof mounting and are made of heavy gauge hardened aluminium. The fan and motor are mounted on a heavy gauge diaphragm plate which is fitted to the roof independently of the extractor head and stack. Thus the unit can be handled in two easily manageable parts, a factor which should be useful for installations requiring the larger size units. The extractor head is designed to overlap the stack sufficiently to ensure that the unit is weatherproof without causing restriction of the airflow through the extractor. Internal autoshutters, made of aluminium, can be fitted if required, a useful addition where exceptional changes of tem-perature occurs. The motor is installed above the fan in the extractor stack, thus making the removal of the head for lubrication unnecessary and doing away with the need for access panels in the roof. The motor is of the totally enclosed squirrel cage induction type, tested to BSS 2613:1955 and BSS 170:1939, and is designed to reduce magnetic and running noise to an absolute minimum. It is suitable for continuous operation ambient temperatures of up to 104 Terminal boxes are designed for use with screwed conduits. Standard motors are wound for normal single phase or three phase A.C. supply. Buxton flame-proof and acid or fume proof motors are available as an alternative to the



standard type. Flat roof models can be supplied in sizes ranging from 22in sq by 20in high to 66in sq by 381in high and sloping roof models in sizes from 22in sq by 13\{\frac{1}{2}\)in high to 66in sq by 443in high.

Greenwood's and Airvac Ventilaing Co. Ltd., Beacon House, Kings-way, London, W.C.2. Chancery 8135.

Readers' Information Service, Ref. E. Date 16/12/59.

New Centrifugal Pumps

A new type of pump has been added to the range of Monobloc added to the range of Monobloc centrifugal pumps. They are open impeller type pumps, called DO pumps, and are specially designed to handle slurries, paper stock, liquids containing small solids, and viscous liquids as well as clear liquids. The new pumps have capacities ranging from 10 to 360 gall/min., and heads up to 86ft, depending on capacity.

Worthington-Simpson Ltd., Lowfield Works, Newark, Notts.

Readers' Information Service. Ref. F. Date 16/12/59.

New Collapsible Grille (G)

The portcullis type of grille has been added to this company's range of collapsible grilles. It is made from mild steel and is intended primarily for exterior use. The distance pieces are of ½in dia. tube, the ends of which are sealed and then reduced to accommodate fin dia lateral rods on which the grille is assembled with ½in by 3/16in vertical links, to form a mesh aperture of 7½in by 2½in. The guides are of mild steel box channel section 11in by 11in making a light but strong side support. The grille is fitted at



NEW PRODUCTS (continued)

a convenient height from the ground with a five lever dead lock with hardened steel pins inserted in the bolt.

The grille operates on a spring loaded roller and stove enamelling gives an attractive hard wearing finish. The company is also developing a wicket gate and hopes to cover spans of up to 18ft in width and to operate the grille by means of a geared winch or electric motor.

Rely-a-Bell Burglar & Fire Alarm Co. Ltd., The Security Centre, 54 Wilson Street, London, E.C.2. Bishonsegte 1955.

Readers' Information Service, Ref. G. Date 16/12/59,

New Electric Convectors (H)

Two of the first productions of the newly formed Sofono Electrical Division are the Spacemaster Convector/Reflector (illustrated) and the Spacemaster Convector fires. These are of an entirely new round type of design, somewhat similar in appearance, with the exception that the convector reflector has a built-in reflector fire, complete with guard. Both types incorporate a variable thermostat control and are offered in a range of duo-tone colours. The convector model is available either as 1kW with pilot lamp, 1kW with thermostat, 2kW with half-heat switch and 2kW with thermostat but without half-heat switch. The first of these is available for both A.C. and D.C., whilst the other three are for A.C. supplies only. Respective prices are £6 12s 6d, £7 13s 9d, £7 12s 0d and £8 10s 4d. The convector reflector model is available as a 1kW convector with a built-in 750W reflector fire, which also has a separate switch; a lkW convector with switch for convector element as well as for reflector fire; a 2kW convector with thermostat and built-in 750W reflector fire with separate switch. These three models are available for A.C. supplies only and respective costs are £8 18s 7d, £9 3s 6d and £10 14s 1d. All Sofono Spacemaster convectors are available for either 200/220 or 230/250V.

Sofono Electrical Division, Grange-Camelon Iron Co. Ltd., 4 Stratford Place, London, W.1. Mayfair 5054. Readers' Information Service, Ref. H. Date 16/12/59.

New Masonite Panelling

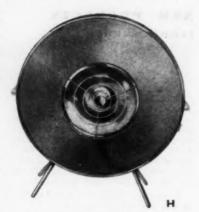
Hardboard panels with a factory-printed wood grain finish, known as Royalcote panelling, are the latest production from Masonite, U.S.A. They are suitable for wall and partition lining, domestic and office furniture, built-in fitments, and radio and television cabinets. There are three varieties of wood grain effects and apart from plain panels, there are some with a series of V grooves set at 16in centres to width, which form an unbroken pattern at joints, thus avoiding the need for cover strips. The three surface finishes available are misty walnut, champagne walnut and rose walnut and they need only wax or similar transparent finish for maintenance. The panels are available in the standard size of 8ft by 4ft by \$\frac{1}{2}\$ in thickness. Price: 1s 10d per sq ft for the plain boards and 1s 11d for the grooved.

C. F. Anderson & Son Ltd., Harris Wharf, Graham Street, London, N.1.

Canonbury 1212.
Readers' Information Service,
Ref. I. Date 16/12/59.

New Kingston Bidet (J)

The Kingston range of vitreous china sanitary products has been completed by the addition of a bidet. This fitting follows the washhand basin and closet of the same name and the three products together form a complete bathroom suite. The bidet is non-porous throughout and has chromium plated combination fittings including a transfer valve for directing water to either the rim or the ascending spray. Hot and cold water are mixed to the required temperature



and a pop-up waste is fitted. The unit is available in a choice of the five Standard colours and white.

Ideal Boilers & Radiators Ltd., Ideal House, Great Marlborough Street, London, W.I. Gerrard 8686. Readers' Information Service, Ref. J. Date 16/12/59.

Modified Steel Strip

Addyco steel strip has been modifield in design and now has V notches on the strip which are positioned at lin intervals. The strip is made of 16 gauge mild steel and is rust-proofed. It is supplied in two colours, red and green. It is a general purpose article which can be used by the handyman for shelf brackets, pipe clips, tool racks, corner brackets, clamps, strengthening pieces, tie rods, stiffeners, pelmet supports and for many other fixing purposes. It is supplied in lengths of 18in for 1s 3d and also in 6ft lengths (electro zinc galvanized) for 5s.

Addy Products (Sales) Ltd., Millbrook Trading Estate, Southampton. Southampton 73156.

Readers' Information Service, Ref. K. Date 16/12/59.

New Rubber-based Paint

Aspilin Seal and Prime is a new rubber-based paint which has been specially formulated for use when moisture and alkali salts are present in new wall plaster and cement renderings. It is claimed to provide a sound protective barrier when applied to asbestos-cement and other "hot" alkaline surfaces. It is stated to be damp-proof and to be capable of drying hard in six to eight hours when applied to damp and alkaline surfaces. Coverage: 70-80 sq yd per gal on smooth surfaces and 50-60 sq yd per gal on rough and highly porous surfaces. It is suitable for spraying and is available in an off-white colour.

Aspinalls (Paints) Ltd., Carleton, Skipton, Yorks. Readers' Information Service,

Ref. L. Date 16/12/59.





For plasticity and firmness

Plasticity during application and firmness in situ are qualities which characterise a mortar made with Tunnel Masonry Cement.

This material is composed of cement, fillers and plasticisers in finely adjusted proportions. No lime is used in its manufacture, so there is absolutely no risk of blowing, spalling or disintegration when Tunnel Masonry Cement is used. On the contrary the mortar works well, stiffens quickly enough, has adequate strength. bonds well, is durable and provides a pleasing finish.



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lightweight aggregate

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Lytag is suitable for the manufacture of structural concrete up to a compression strength of 4,500 lbs. sq. inch.

Being spherical, Lytag gives strength and workability using less cement per cubic yard.

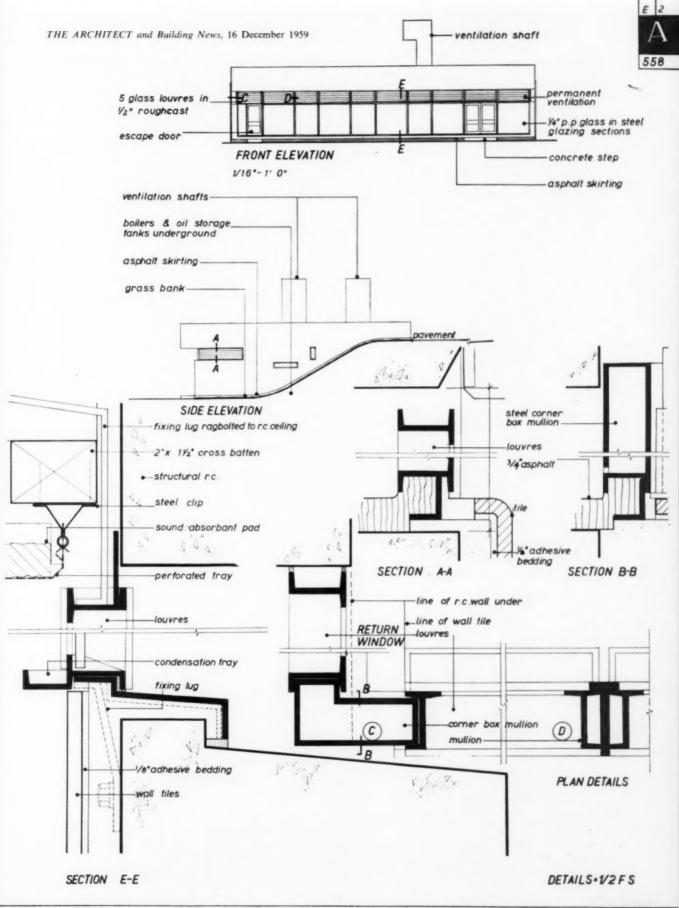
Lytag is a lightweight aggregate produced from pulverised fuel ash by a carefully controlled sintering process. Spherical in shape, it has a slightly roughened surface so providing an excellent key for the adhesion of cement.

It has been the subject of close scientific scrutiny throughout its development, and the results of this scrutiny are summed up in a number of technical papers which will be forwarded upon request.

LYTAG LIMITED

Manor Way, Boreham Wood, Hertfordshire Telephone: Elstree 2854

LAING COMPANY

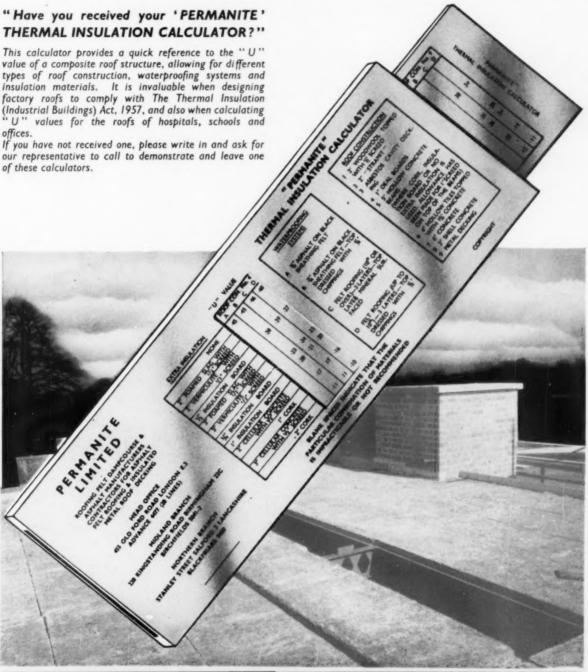






The boiler house on the L.C.C. Alton Estate at Roehampton provides hot water for heating for over 1,000 dwellings, and two schools by means of two ring mains, one flow ring and one return ring. The three boilers and the oil tanks are all housed underground. The boiler house is constructed in concrete with a boarded shuttering finish, the metal windows are painted grey and permanent ventilation is provided by fixed glass louvres. It was designed by the Housing Division of the L.C.C. Architect's Department, Architect to the Council, Hubert Bennett

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A feature of this speedy erection was the welding-up of each complete roof bay on site and lifting on to its columns by mobile cranes. This building, for the Compositions Division of the Dunlop Rubber Company Ltd., at Fort Dunlop, has a tubular steel framework designed and fabricated by Tubewrights Ltd. The Architect was Mr. Stuart Bentley. This method of construction lends itself to large and small industrial buildings, and Tubewrights' engineers are ready at all times to give prospective users the benefit of their wide experience.





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Top: Longitudinal view of one of the bays showing space frame construction and end thrust girder.

Left: An external view of the completed building which covers an area of over 32,000 sq. ft.

Above: A view showing that the space frame method of construction gives completely unobstructed floor space.

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Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the



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CONTRACT NEWS •

OPEN

BUILDING

BATH C.C. (a) Erection of 122 dwellings on Twerton-Whiteway estate, (b) City Architect and Planning Officer, 7 North Parade Buildings, Bath. (c) 2gn. (d) December 19. (e) February 10.

BEDFORDSHIRE C.C. (a) Erection of a county secondary school at Brewers Hill, Dunstable, mainly two-storey buildings in reinforced concrete construction.

(b) County Architect, Shire Hall, Bedford, giving details of similar contracts recently carried out.

(d) December 17.

BELFAST. (a) Alterations and extensions to Belfast Methodist College. (b) Rae, Stevenson & Sons, 33 College Gardens, Belfast. (c) 5gn. (e) December 30.

BENFLEET U.C. (a) Erection of 29 bungalows at Hadleigh, Essex, and an old people's hostel comprising 32 units and 19 houses at South Benfleet, together with roadworks in each case. (b) Engineer and Surveyor, County Offices, Thundersley, Essex. (d) December 18.

BRIGHTON B.C. (a) Erection of sea front shelters. (b) Borough Surveyor, Engineer and King's Road, January 2. Planning Officer, 26-30 Brighton. (c) 2gn. (e)

BRISTOL. (a) Erection of covered swimming pool, size 110ft by 42ft, at Soundwell Baths. (b) Burrough & Hannam, 23 Richmond Hill, Bristol, 8. (d) Immediately.

BURTON-ON-TRENT B.C. (a) Erection of 150 dwellings and 30 garages of traditional construction of the Edge Hill housing estate. (b) Borough Architect, Town Hall. (c) 2gn. (e) January 21.

CARMARTHENSHIRE C.C. (a) Erection of the following at Lower Court estate. St. Clears: (1) Farm homestead; (2) Farm outbuildings; (3) Ancillary works. (b) County Land Agent, Estates Dept., 5 Queen Street, Carmarthen. (c) 2gn. (d) December 19. (e) December 28.

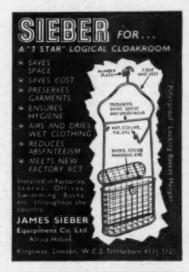
DEWSBURY B.C. (a) Alterations to police garage to provide kitchen, dining and toilet accommodation. (b) Borough Architect and Buildings Surveyor, Town Hall. (e) January 4.

DORCHESTER. (a) Erection of a block of science laboratories at Hardy's School. (b) Lambert & Oliver, Architects, 35 South Street, Bridport, Dorset. (c) 4gn.

EAST RIDING OF YORKSHIRE C.C. (a) (1) Erection of a two-form entry county primary school at Howden; (2) First phase of an infant's school at Anlaby, near Hull. (b) County Architect, County Hall, Beverley. (c) 2gn. (e) Lanuary 12 January 12.

EIRE—KERRY C.C. (a) Construction of Milltown sewerage scheme for Kerry County Council. (b) Messrs. O'Connell & Harley, 19 South Mall, Cork. (c) 10gn. (e) February 1.

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.



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EIRE—KERRY C.C. (a) Construction of a sewerage scheme for the village of Moyvane, for Kerry County Council. (b) Mr. Ed Ralph Ryan, 1 Mountpellier Terrace, Galway. (c) 10gn. (e) February 8.

EIRE-KILKENNY C.C. (a) Construction of a water supply scheme in the Clogh region north of Castlecomer, for Kilkenny Council. (b) Thomas J. O. Connor & Co., Commercial Buildings, Dame Street, Dublin. (c) 25gn. (e) Feb-

EIRE—WESTMEATH C.C. (a) Erection of 10 houses and shop dwellings, together with site works and development at Moate, for Westmeath County Council. (b) Philip Ginnell, Esq., Architect, 31 Pearse Street, Mullingar. (c) £10. (e) January 7.

HEREFORD B.C. (a) Erection of 103 two-storey traditional houses and 88 garages on a site at Red Hill. (b) Archi-tect, Town Hall. (c) 2gn. (e) January 4.

HOLLINGBOURNE R.C. (a) Modernizing of houses; (1) eight at Bredhurst; eight at Hollingbourne; ten at Langley; six at Leeds; ten at Lenham; 12 at Warmlake, Sutton Vallance. (b) Sur-veyor, Council Offices, 73 College Road, Maidstone. (c) 1gn each group. (e) January 4.

KNUTSFORD U.C. (a) Construction of a café and two kiosks at Stanley Park. (b) Surveyor, Council Offices, Toft Road, Knutsford. (c) 2gn. (e) December 28.

LIMERICK, EIRE. (a) Erection of a primary school at Presentation Convent, Sexton Street. (b) D. J. O'Brien, Quan-tity Surveyor, 87 O'Connell Street, Limerick. (c) £25.

LINDSEY (LINCS) C.C. (a) Erection of phases 3 and 4 of North Lindsey Technical College, Kingsway, Scunthorpe. Buildings will be of steelframe construction 43,000 sq ft in area, with roadstruction 43,000 sq ft in area, with road-works, outfall sewers and alterations to existing buildings. (b) County Architect, Couny Offices, Lincoln. (c) 5gn. (d) January 5. Only contractors with labour and staff to expeditiously carry out a contract of over £175,000 to apply.

LUTON B.C. (a) Erection of 170 dwellings and 146 garages in one contract on Lewsey Farm estate. (b) Borough Architect, Town Hall. (e) January 15.

MID-ANTRIM WATERWORKS JOINT MID-ANTRIM WATERWORKS JOINT BOARD. (a) Erection and completion of three caretakers' cottages and ancil-lary works at Killyland Dam, near Ballyclare. (b) R. Ferguson & S. M'Ilveen, 15 College Gardens, Belfast. (c) 5gn. (e) January 5. NORTH - WEST METROPOLITAN REGIONAL HOSPITAL BOARD. (a) Erection of a five-storey outpatients' and X-ray department, with a singlestorey casualty block attached at Royal Northern Hospital, Holloway Road, London, N.7. The main frontage will adjoin the existing hospital. Estimated cost of the project is approximately £450,000. (b) Regional Architect, 40 Eastbourne Terrace, London, W.2. (d) Eastbourne T December 22.

READING B.C. (a) Erection of a care-taker's house at Southlands Secondary taker's house at Southlands Secondary School for Girls, Northumberland Avenue. (b) Howard B. Lobb & Part-ners, 20 Gower Street, London, W.C.I. (e) December 29.

SALFORD C.C. (a) Construction of 56 maisonnettes in five four-storey blocks at Regent Road development area No. 1, Salford, 5. (b) City Engineer and Surveyor, Town Hall, 3. (c) 3gn. (e) January 6.

SMETHWICK B.C. (a) Alterations and partial internal redecoration of "Hill Crest" Home for aged persons. (b) Borough Engineer and Surveyor, Council House, Smethwick, 40. (c) 2gn. (e) January 13.

ULSTER—ANTRIM R.C. (a) Construction of 24 houses, together with roads and other ancillary works, at The Steeple, Antrim. (b) Messrs. McCarthy & Lilburn, Scottish Provident Buildings, Belfast. (c) 5gn. (e) December 21.

ULSTER—ANTRIM R.C. (a) Construction of 86 houses at Crumlin and 31 houses at Roughfort, together with roads and other ancillary works for Antrim Rural District Council. (b) Messrs. McCarthy & Lilburn, Scottish Provident Buildings, Belfast. (c) 5gn. (e) December 21.

ULSTER-BALLYMENA R.C. Erection of 37 houses and construction of site works at Ballymawea (near Kells) at Housing Scheme No. 12, for Ballymena Rural District Council. (b) Messrs. Ogilby & McCutcheon, 9 Upper Crescent, Belfast. (c) 5gn. (e) December 19.

ULSTER-BANBRIDGE U.C. (a) Erection of 76 houses together with ancillary and enginering works at Banbridge, for Banbridge Urban District Council. (b) Messrs. Neal P. Heron & Partners, Bridge Street, Banbridge. (c) 5gn. (e) December 28.

ULSTER-ENNISKILLEN R.C. Erection of 12 houses with garages, sewage disposal works, roads, fences, fences, etc., connected therewith at Ballanaleck, Erniskillen, for Enniskillen Rural District Council. (b) Walter Megaw, Clerk of the Council. Council Offices, Cornagrade, Enniskillen, Co. Fermanagh. (c) 5gn. (e) December 18. WAKEFIELD C.C. (a) Erection of (1) Gymnasium and scullery at Ings Road school; (2) Reconstruction work at the Central Nursery and erection of garages at Thornes Park. (b) City Engineer, Town Hall. (d) December 18.

WHITCHURCH U.C. (a) Erection of eight one-bedroom flats with outbuildings, forecourt walling and entrance gates at Claypit Street. (b) Engineer and Surveyor, Paul's Moss, Dodington, Whit-church, Salop. (c) 2gn. (e) December 29.

WIGTOWN C.C. (a) Construction of and additions to Garlieston Primary and additions to Garlieston Primary School and Kirkinner Primary School. Excavator, concreter, mason and brick, glazier, slater, carpenter and joiner, plumber, plaster and cement, electrical work. (b) County Architect, 23 Lewis Street, Stranraer. (d) December 18.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final accep-tance, or obtaining of licence, or modification of tenders, etc.

BOLTON B.C. (1) Erection of 30 flats (2) School Hill. (3) Direct Labour. (4) £43,250. (1) 23 dwellings. (2) Horeb Road East industrial estate. (3) Thos. (4) £37.294.

CHESTER C.C. (1) Erection of 42 houses and flats. (2) Plas Newton estate. (3) G. C. Shone & Co. Ltd., Mickle Trafford, Chester. (4) £106,302.

CITY OF LONDON CORPORATION. (1) Conversion of flats into 44 self-contained flatlets. (2) North Flats, Harrow Place. (3) Charles S. Foster & Sons Ltd., Smarts Lane, Loughton, Essex. (4) £64,000.

COALVILLE U.C. (1) 94 houses. (2) Greenhill estate. (3) W. Deane (Leicester) Ltd., 103 Kirby Road, Leicester.

COVENTRY C.C. (1) Rebuilding war-damaged swimming bath. (2) Livingstone Road. (3) W. H. Jones & Son Ltd., Hol-brook Lane, Coventry. (4) £59,278.

DUDLEY B.C. (1) Erection of a central clinic. (3) John Dallow & Sons Ltd., John Street, Blackheath, Birmingham. (4) £59,820.

ELLESMERE PORT B.C. (1) Construc-tion of a municipal depot. (2) Rossmore Street, Willows Lane. (3) Direct labour. Warrington & Sons Ltd., Ellesmere Port, Ches. (4) £209,949.

EXETER C.C. (1) Erection of 158 non-traditional dwellings. (2) Barley Mount estate. (3) George Wimpey & Co. Ltd., Hammersmith, W.6. (4) £263,338.

Compri-Ship FOR SEALING

HENDON B.C. (1) Second stage of redevelopment. (2) New Brent Street. (3) George Wimpey & Co. Ltd., Hammersmith, W.6. (4) £104,272.

ILKESTON. (1) Bus depot, for Midland General Omnibus Co. Ltd. (2) F. Sisson & Sons Ltd., Langley Mill, Nottingham. (4) £65,000.

KENSINGTON, S.W. (1) Erection of additions to Kensington Art College. (2) Kensington Gore, S.W.7. (3) Leslie & Co. Ltd., 20 Peel Street, London, W.8. (4) £500,000.

LICHFIELD C.C. (1) 90 houses. (2) Wheel Lane estate. (3) K. S. Rock & Co. Ltd., Little Pountney Street, Wolverhampton. (4) £129,795.

LIVERPOOL C.C. (1) Erection of the North-West Liverpool Branch Technical College. (2) William Thornton & Sons Ltd., 38 Wellington Road, Liverpool. (4) £397,911.

LIVERPOOL. (1) Erection of a plastics factory for Metal Box Co. Ltd. (2) Speke. (3) Holland & Hannen and Cubitts Ltd., New Chester Road, Bromborough, Ches. (4) £350,000.

LONDON C.C. (1) Block of multistorey flats. (2) Osier Street, Stepney E. (3) Tersons Ltd., 4 Dollis Park, Finchley, N.3. (4) £287,000.

LONDON C.C. (1) 11-storey block of flats, etc. (2) Lawson estate, Southwark, S.E. (3) John Laing & Son Ltd., London, N.W.7. (4) £132,220.

MANCHESTER C.C. (1) Erection of 91 dwellings. (2) Handforth. (3) T. Costelle Ltd., 334 Wellington Road North, Stockport.

MARSKE, YORKS. (1) Erection of 117 houses. (2) Opposite Parish Church, Marske. (3) The Laing Housing Co. Ltd., Lowther Road, Stanmore, Middlesex.

NATIONAL COAL BOARD (SCOTTISH) DIVISION. (1) Erection of an eight-storey building. (2) Lady Lawson Street, Edinburgh. (3) W. & J. R. Watson Ltd., 63 Station Road, Edinburgh.

NEWCASTLE-ON-TYNE. (1) Erection of a block of luxury flats. (2) Montagu Avenue. (3) Cussins (Contractors) Ltd., The Drive, Gosforth.

NORTHAMPTONSHIRE C.C. (1) Erection of a secondary modern school. (2) King's Cliffe, and a primary school at Buttocks Booth, Weston Favell. (3) H. J. Firman Ltd., Newark Road, Peterborough, and A. Glenn & Sons Ltd., Chaucer Street, Northampton, respectively.

N.W. METROPOLITAN REGIONAL HOSPITAL BOARD. (1) Erection of outpatients' clinic. (2) Stevenage Town. (3) John Willmott & Sons (Hitchin) Ltd., Walsworth Road, Hitchin. (4) £69,011.

PETERBOROUGH. (1) Erection of a research and development centre for A.E.I.-Hotpoint Ltd. (2) Adjoining the present works. (3) Sir Robert McAlpine & Sons Ltd., 80 Park Lane, London, W.1. (4) £250,000.

PORTSMOUTH C.C. (1) Erection of 72 flats and maisonnettes. (2) Furze Lane. (3) J. F. Figgins (Builders) Ltd., 33 Drayton Lane, Portsmouth. (4) £140.985.

ROCHESTER C.C. (1) Erection of 100 houses. (3) Peak Construction Co. Ltd., Knights Road, Strood, Kent. (4) £161,161.

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SEVENOAKS, KENT. (1) Erection of two three-storey office blocks for Marley Tile Co. Ltd. (2) Riverhead. (3) John Laing & Son Ltd., Mill Hill, London, N.W.7. (4) £144,000.

SHEFFIELD. (1) Erection of a block of shops and offices for Pearl Assurance Co. Ltd. (2) King Street. (3) Tersons Ltd., 4 Dollis Park, Finchley, London, N.3. (4) £113,000.

SHEFFIELD. (1) Erection of University House, for University of Sheffield. (3) Tersons Ltd., 4 Dollis Park, London, N.3. (4) £575,000.

SHOREDITCH B.C. (1) Two blocks of flats. (2) Regents Row estate. (3) Tersons Ltd., 4 Dollis Park, London, N.3. (4) £313,000.

SHIPLEY B.C. (1) 63 flats. (2) Crag Road. (3) Gregory Construction (North-Eastern) Ltd., Coombe Hill, Haltwhistle, Northumberland. (4) £68,846.

SOUTHEND-ON-SEA B.C. (1) Contract No. 1 of the Civic Centre 15-storey block. (3) Gee, Walker & Slater Ltd., 100 Park Lane, London, W.1. (4) £139,975.

STALYBRIDGE B.C. (1) 63 flats, (2) Crag Road. (3) Unity Structures Ltd., London, W.C.1. (4) £79,835.

ST. HELENS. (1) Erection of departmental stores for Tyrers Ltd. (2) Bridge Street. (3) Thos. Winstanley & Sons Ltd., Rainford, Lancs.

WAKEFIELD C.C. (1) First stage of extensions to Technical College. (3) W. G. Birch (Harrogate) Ltd., 63 Great George Street, Leeds, 1. (3) £200,000.

WELLINGTON U.C. (1) 60 maisonnettes and 18 flats. (2) High Street. (3) Sir Alfred McAlpine & Sons Ltd., Hooton, Little Sutton, Wirral, Ches. (4) £129,834.

WEST HAM B.C. (1) Erection of 11storey block of flats and 78 maisonnettes and 13 houses. (2) Adamson Road. (3) A. E. Sumes Ltd., Albert House, High Street, London, E.15.

WEST HAM B.C. (1) 44 flats, 78 maisonnettes, 13 houses, 23 garages. (2) Adamson Road. (3) A. E. Symes Ltd., 236 High Street, London, E.15. (4) £298.860. (1) 20 maisonnettes, ten houses, etc. (2) Ethel and Leslie Roads. (3) W. J. Jerram Ltd., Sandford Road, East Ham, E.6. (4) £74,556.

WOKINGHAM R.C. (1) Erection of a council chamber. (2) Shute End. (3) W. & A. Scott Builders (Wokingham) Ltd., 59 Nine Mile Ride, Finchampstead. (4) £9,614.

WORCESTER C.C. (1) Erection of a girls' grammar school. (2) Spetchley Road. (3) Spicers Ltd.. Ombersley Road, Worcester. (4) £334,783.

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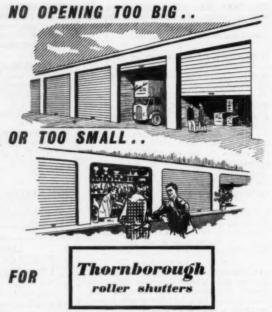


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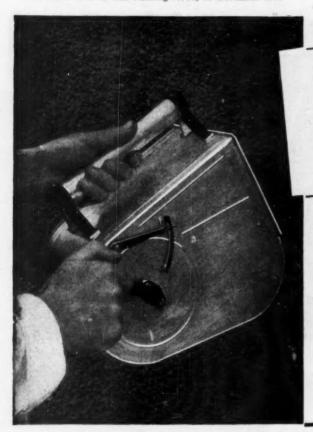
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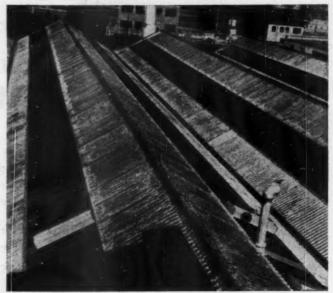
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Sylglas Glazing and Sealing Tape was used to seal the roof of one of the factories of Vandervell Products Ltd., the makers of Thinwall Bearings and Bushings.

Sylglas is quick and easy to apply, does not deteriorate and is unaffected by vibration.

Available in tape, cord and mastic forms, Sylglas is ideal for waterproofing any arealarge or small; is effective yet inexpensive.

Obtainable from Builders' Merchants, Hardware Merchants or Ironmongers. If you have any waterproofing problems we shall be glad to help or give you advice.

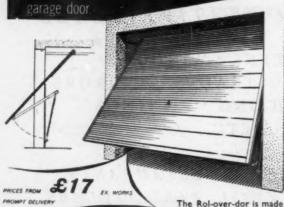


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stronger to last longer. 24 gauge hot galvanised interlocking steel slats form a continuous full width joint giving great strength and rigidity. The unique design operated by counter-balanced springs gives finger-tip control.

No weights! No pulleys! The Rol-over-dor is supplied complete with all the necessary operating gear and with lock. Three sizes:- 7 ft. wide x 6 ft. 6 ins. high, 7 ft, x 7 ft, and B ft

made by

MAKERS OF THE WORLD FAMOUS BOLADOR SHUTTERS

FULL RANGE OF SURFEX FLOORING PRODUCTS



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INDUSTRIAL VINYL SURFEX

The hardest, toughest jointless Industrial Flooring that is Decorative, Non-Dusting and Spark Proof. Awarded the Certificate of Merit by the Royal Institute of Public Health and Hygiene.

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Heavy Industrial Flooring. The Flooring that will stand up to Tracked Vehicle Traffic.

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The original Self-Veining Plastic Flooring. Suitable for Shops, Offices and in the Home.

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A New Wet or Dry Non-Slip Plastic Flooring easily laid on any dry Surface, on Ramps, Platforms, Steps, Gangways, Etc.

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The indestructible Cladding and Welding Material. May Heavy Loads, Impacts and also be used as a flooring Mortar.

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Think zinc, the versatile metal for building applications, from a complete roof to flashings and porch hoods. Easy to form and fix, it is an economical and durable metal which blends happily with all architectural styles. A modern building material, zinc has been proved in service for more than a century.

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"AND FOR THE FLOORING WE'LL USE **MERTHYRWARE**"

Always specify Merthyrware - real ceramic tiles, for all schools, municipal and industrial uses, and for houses too. Rich red-brown or buff; guaranteed hard wearing; impervious surface resists acids, frost and fire. Easily cleaned.

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Our Beam system gives a maximum of standardization to obtain economy and yet at the same time allows complete freedom to architectural planning.

LATTICE BEAMS

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These beams are widely used in the modern planning of factories, school classrooms, offices, canteens, etc., where spans of 20°0° to 40°0° are encountered. They are most economic for all light roofing, combine well with the many prefabricated slabs which span directly between supporting joists.



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ROLLING SHUTTERS in Steel, Wood and Aluminium Alloy

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For constant hot water and reliable central heating at the lowest cost, you can confidently recommend a Janitor Solid Fuel or Oil-Fired Boiler.

The design, workmanship and operating efficiency of Janitor Boilers appeal to the most discriminating buyers, and all models are available in any colour to suit particular decorative schemes.

Attractive hire purchase terms, including all installation charges, can be arranged.

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JUNIOR	\$5,000 B.t.u/h	JUNIOR	35,000	8. t. u/h
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0.1.	125,000 B.t.u/h	A.2.	80,000	B.t.u/h
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London Showrooms: 19 Berkeley Street, London, W.I.

Architect coping with a problem

His problem? To have a large area including stairs and coves covered with P.V.C. flooring; to provide a smooth unbroken surface; and to have the job done quickly, easily and at minimum cost.

His solution? The specification of Phenco Viynl-Plastic Flooring; Phenco Nosings and Covings; Phenco Welding Rod; and, to marry them all together into one continuous, joint-less surface, the use of a Phoenix Automatic Welding Machine. And, if a man who has made arrangements as watertight as these can't take time off to feed pigeons, who can?

THE PHOENIX AUTOMATIC WELDING MACHINE (B.P. 802,933)

Welds all types of vinyl flooring to form a jointless surface. Electrically driven, fully automatic. Costs £150. works wonders, saves money hand over fist.



Phenco Welding Rod Suitable for automatic and nonautomatic welding methods. Costs approx. 1d. per foot. Available in 16 colours.

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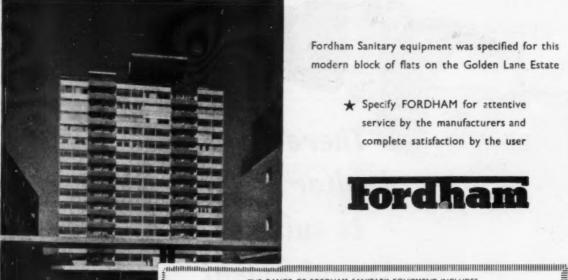
Stock lengths—9 ft Standard colours, black, white or brown. Other lengths and colours to order.

Please write or telephone for details and/or samples



FLOORING PRODUCTS

Phoenix Rubber Co. Ltd., Slough, Buckinghamshire Telephone: Slough 22037/9 OA/55458



Fordham Sanitary equipment was specified for this modern block of flats on the Golden Lane Estate

> * Specify FORDHAM for attentive service by the manufacturers and complete satisfaction by the user

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Golden Lane Estate

Architect: Chamberlin, Powell & Bon.

THE RANGE OF FORDHAM SANITARY EQUIPMENT INCLUDES

FLUSHING TROUGHS PANEL MODEL

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FORDHAM PRESSINGS LTD.. HEAD OFFICE AND WORKS: DUDLEY ROAD. Other factories at Earlsfield (London), Hinckley (Leics), Sedgley (Staffs)

"GLYDOVER" all steel overhead garage doors

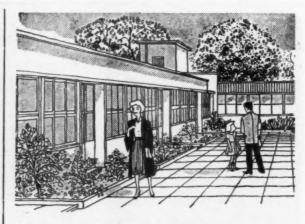
for every style of architecture

* Please write for literature giving standard sizes etc. available under Reference AB 333 Four panel construction minimizes maintenance and a finger touch operates the door leaving an unrestricted entrance.



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'NOELITE' paving for modern architecture

Noelite is on permanent exhibition at the BUILDING CENTRE. and free descriptive literature and samples are available to architects and builders

Strong, durable, attractive Noelite is a precast slab with a non-slip surface-easy to lay, inexpensive in price. Available in numerous sizes and in five colours it gives on request. scope for creative design.

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OFFICIAL ANNOUNCEMENTS APPOINTMENTS CONTRACTS

Rate: 20/- per inch and pro rata, minimum half inch. Close for press 1st post Monday for following Wednesday Issue

CLASSIFIED ADVERTISEMENTS CHRISTMAS PRESS NOTICE

The issue dated DEC. 23 will close for Press first post on THURSDAY, DEC. 17.

The issue dated DEC. 30 will close for Press first post on TUESDAY, DEC. 22. And the issue dated JAN. 6 will close first post on FRDIAY, JAN. 1.

APPOINTMENTS

APPLICATIONS are invited for the appointment of Architectural Assistant within the Special Classes Grade (£785/£1,070). Commencing salary to be according to qualifications and experience.
Housing accommodation available. Canvassing disqualifies.

disqualifies.

Application forms and conditions of appointment obtainable from A. O. Marshall, Borough Surveyor and Water Engineer, Town Hall, Ilkeston, to whom they are to be returned by Monday, January 4, 1960.

J. YATES, Town Clerk. [5900]

Beaston and Stapleford Urona ARCHITECTURAL ASSISTANT
APPLICATIONS are invited for the above appointment, in Grade II (£765/£880) or Special Grade (£785/£1,070), the grade and commencing salary to be according to applicant's qualifications and experience.
Applications, accompanied by the names and addresses of two referees, should be forwarded to the Housing Architect, Town Hall, Beeston, Nottingham, not later than December 21, 1959.
H. D. JEFFRIES,
Clerk of the Council.
[5913]

ARCHITECTS AND MAINTENANCE SUR-VEYORS, Pensionable posts for men and women at least 25 and under 35 on January 1, 1959 (extension for regular Forces service, Oversease Civil Service, established Civil Service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate Membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate Membership. Starting salary (men, London) from £80/£1,125 according to age. Scale maximum (London) £1,300. Promotion prospects, Wite Civil Service Commission, 17 North Audley Street, London, W.1, for application form quoting \$60-61.

University, Hospital and General Practice
Belfast, Northera Ireland
POSTS of Principal, also Senior Assistants, are open, with possibility of Associateship, with the undersigned who would be glad to receive applications from experienced architects to join in this interesting range of contemporary work.

The services would be required primarily in Belfast, although preparation of work is possible in London office or Liverpool,
Terms and local conditions given to candidates interviewed—venue London and/or Belfast.

Applicants please write giving particulars and note of present salary grade, age and position in which interested,
John MacGeagh, A.R.I.B.A. (Bronze Medal),
7 Donegall Square West, Belfast, 1. [5924]

Portsmouth College of Art
Principal: W. J. L. Gaydon, A.R.C.A.
APPLICATIONS are invited for the post of
Studio Master and Lecturer in the School of
Architecture. Preference will be given to applicants who have been trained in a recognized
school of architecture, are Associates of the Royal
Institute of British Architects and have at least
three years post-academic practical experience.
The salary will be in accordance with the
Burnham Technical Scale for Lecturers, viz.,
21.370/x 24.55-e1.550.
Further particulars and forms of application,
which should be returned as soon as possible,
may be obtained from the Registrar, College of
Art, Guildhall Square, Portsmouth. [5939]

APPOINTMENTS (cont)

D.S.I.R., Building Research Station
REQUIRES at Garston, Watford, 'Herts, man to assist in dealing with technical inquiries and in general liaison with building industry. Qualifications: A.I.O.B., H.N.D. or H.N.C., with at least 15 years' experience in building industry. Architects or engineers with taste for interpretation of scientific information and its applications considered. Elementary scientific training (at least to G.C.E. "O' level) an advantage. Salary range £1,315/£1,560. Forms from Minlstry of Labour, Technical and Scientific Register (K), 26 King Street, London, S.W.I. quoting E.507/9A. Closing date January 4, 1960. [5926]

ARCHITECTS BUILDING SURVEYORS LANDSCAPE ARCHITECTS QUANTITY SURVEYORS

ASSISTANTS ASSISTANTS

REQUIRED for construction and maintenance of parks and playing fields, sports buildings, restaurants, service buildings, etc. Salaries up to £1,135 for applicants with appropriate professional qualifications or £895 for Assistants (preferably Interstandard). Starting point according to qualifications and experience. Also opportunities for Juniors.

Juniors
Apply to Chief Officer, Parks Department,
London County Council, County Hall, London,
S.E.1 (WATerloo 5000, extension 8076). (2727)

City of Bradford
APPLICATIONS are invited for the following permanent posts:
(a) Assistant Architects, APT IV (£1,065/£1,220).

£1,220).
(b) Assistant Architects, APT I (£610/£765).
The Department has a number of large projects in hand, including the new Bradford Institute of Technology, affording ample scope and opportunities.

Technology, anording ample scope trunities.

Candidates for (a) must be Corporate Members of the R.I.B.A. with varied office experience and (b) must have passed the Intermediate examination of the R.I.B.A.

No assistance can be given in the provision of housing accommodation.

Application forms obtainable from the City Architect, Town Hall, returnable with copies of two recent testimonials by January 2, 1960.

W. H. LEATHEM.

Town Hall.

South Australian School of Mines and Industries
North Terrace, Adelaide
APPLICATIONS are invited for the position of:
Lecturer in the Department of Architecture.
An applicant should hold a descree or diploma in architecture and be a corporate member of an appropriate professional body. Previous experience as an architect is essential.

Salary: £A1,870 p.a. but may be increased by annual increments to £A2,050 p.a. if the applicant holds an appropriate Honours Degree or approved higher qualification.

The successful applicant may be required to lecture and conduct classes in subjects of the Architectural, Town Planning, Building or Ouantity Surveying Courses for which he is qualified, and to devote the whole of his time to the duties of his office.

The position carries liberal sick leave and suncrannuation benefits, Assistance will be provided for travelling expenses of the successful applicant and for transport of personal, effects.

Applications with supporting documents should reach the Agent-General and Trade Commissioner for South Australia, 50 Strand, London, W.C.2, not later than December 31, 1959.

R. W. PARSONS.

[5930]

Principal.

Borough of Watford

APPLICATIONS are invited for the appointment
of Assistant Architect at a salary in accordance
with Grade APT 1 (8610/£765 per annum); commencing salary according to qualifications and
experience.

Housing accommodation available.
Applications to the undersigned by January 1, 1960.

F. C. SAGE, Borough Engineer.

APPOINTMENTS (cont)

A WELL-KNOWN firm of Church Furnishers situated on Merseyside require DESIGNER

Applicants must be first-class men and possess a comprehensive knowledge and experience in all aspects of church furnishings and requisites in all materials. It is essential for applicants to have some architectural/draughtsmanship background, and if not of the Catholic Faith, they must have a thorough knowledge of things Catholic.

The successful man will have a good salary, and a permanent position.

and a permanent position.

Please state full details of past experience and Please state full details of past capetions present salary which will be treated in the strictest confidence to Box L194, Lee & Nightingale Ltd., [5918] Liverpool,

Paddington Borough Council

Paddington Borough Council
REQUIRE Clerk of Works (Maintenance and
Repairs), APT II (£795/£910 p.a.). Candidates
should be able to inspect premises, draw up
specifications, measure work, supervise repairs
and examine accounts under a schedule of works
contract. Written applications stating age, qualifications, experience and names and addresses of
three referees should reach the undersigned
(quoting A.441) by January 4, 1960.

W. H. BENTLEY,
Town Clerk.

Town Hall, Paddington Green, W.2.

Paddington Borough Council
ASSISTANT ARCHITECT
(£815/£1,100)
STARTING salary according to qualifications and experience of successful candidate who should preferably be A.R.I.B.A., with experience in the design and supervision of building works of some magnitude and a knowledge of local authority requirements. Applications should state age, qualifications, present and past appointments with dates, names and addresses of three referees. Applications should reach me by January 4, 1960 (quoting A.440).

W. H. BENTLEY.

W. H. BENTLEY, Town Clerk

Town Hall, Paddington Green, W.2.

Borough of Harrow TECHNICAL ASSISTANT
Building Bye-laws
APPLICATIONS are invited from qualified Building Inspectors for the above appointment in the Department of the Borough Engineer and Surveyor, within APT Grade II (£765/£880 per annum, plus London Weighting).
The duties will be mainly in the office advising applicants regarding the Council's Building Byelaws and other matters normally dealt with in the Building Inspector's Section.
The appointment will be subject to the Superannuation Acts and the N.J.C. Scheme of Conditions of Service, Contribution towards removal expenses.

Application forms, obtainable from me, should be returned by December 31, 1959. D. H. PRITCHARD.

Town Clerk's Office, Harrow Weald Lodge, Uxbridge Road, Harrow.

[5941

County Borough of East Ham

SENIOR ASSISTANT PLANNING OFFICER
Grade APT II (£765-£1680)

PRINCIPAL ASSISTANT PLANNING OFFICER
Grade APT III (£869-£16.85)

VACANCIES in Borough Engineer's Department,
London Weighting paid in addition. Salaries
above minimum paid according to qualifications
and experience.

A subsistence allowance presentable.

and experience.

A subsistence allowance may be paid over a reasonable period to persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Details and application form from the Town Clerk, E.6.

Closing date January 1, 1960.

Classified advertisements continued overleaf

APPOINTMENTS (cont)

Rate: 20/- per inch and pro rata, minimum half inch.

Rate: 20|- per Inch half inch.

Borough of Bedey
ARCHITECTURAL ASSISTANTS
APPLICATIONS are invited for two appointments in the Borough Engineer and Surveyor's Department. The salary for each of these posts is within Grade APT II (£765/£880 per annum) plus London Weighting, Preference will be given to suitably qualified candidates with experience of housing and school projects.
Form of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge, Broadway, Besteyheath, Kent, to whom completed applications must be returned by Friday, January 8, 1960.

The Council may be prepared to assist in the provision of housing accommodation, Canvassing will disqualify.

ARTHUR GOLDFINCH,
Town Clerk.

[5936]

Bracknell Development Corporation
APPLICATIONS are invited for the post of Architect, salary range £1,163/£1,390. Applicants must be Corporate Members of the R.I.B.A.
Superannuation schemes, medical examination. Housing available. Apply by January 6, 1960, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. [5935]

City and County of Bristel
Housing Department
(Second Advertisement)
APPLICATIONS invited for post of Technical
Assistant. Salary: Special N.J.C. Scale: £785/
£1,070 p.a.
Applicants must have passed Final Examination of Royal Institution of Chartered Surveyors
(Building) or hold a similar qualification and be
experienced in preparation of plans, specifications
and estimates, particularly in connection with
adaptation and improvement of existing buildings.
Knowledge of procedure in relation to improvement grants an advantage.
Forms of application from Housing Manager,
Council House, Bristol, 1, returnable by December 30.

TENDERS

County Borough of Brighton

FIXED-PRICE Tenders are invited for the:
Alterations and Additions at the Brighton
Public Abattoir comprising of the following:
Two New Lair Blocks, New Gut, Tripe and
Hide Rooms: Alterations to Existing Slaughter
Halla, Covered Ways and Hanging Rooms; New
Office Block, Workshop, Hardstanding, Lorry
Wash Down, Hay and Straw Store.

Bills of Quantities and Form of Tender may
be obtained from the Boroush Surveyor, Envineer
and Planning Officer, 26/30 King's Road,
Brighton, on or after Monday, December 21,
1939, on receipt of a returnable deposit of £2 2s.
Drawinsa may be inspected upon application to
the Borough Surveyor's Office.
Tenders are to be delivered to the Town Clerk
in the envelope provided, not bearing any name
or mark indicating the sender, by noon on
Thursday, January 14, 1960.

W. O. DODD,
Town Clerk.

DD, Town Clerk. [5929

County Borough of Brighton
APPLICATIONS FOR INCLUSION IN LISTS
OF BUILDING CONTRACTORS
APPLICATIONS are invited from building contractors who wish to be placed on the lists of approved contractors who are invited to tender for the Corporation's building contracts. The lists are classified according to contract values as follows:

£500/£5,000

follows:

£500/£5,000
£5,000/£25,000
£5,000/£75,000
£75,000/£75,000
£75,000/£150,000
£75,000/£150,000
Over £300,000.

Contractors applying for inclusion in any list will be required to produce satisfactory evidence that they are capable of carrying out work to that value and will also be required to furnish approved financial references.

Application forms can be obtained from me and should be completed and returned to my office by January 11, 1960.

W. O. DODD.

Town Clerk.

Town Hall, Brighton, 1. December, 1959.

APPOINTMENTS (cont)

London County Council
ARCHITECTS

ARCHITECTS
(up to £1,135)
REQUIRED for Housing, Schools and General
Divisions, Full and varied programme of new
work including schools, multi-storey flats and town
development. Starting salaries according to qualifications and experience.
Particulars and application form from Hubert
Bennett, F.R.I.B.A., Architect to Council,
EK/113/59, County Hall, S.E.I. (2630). [0837]

ARCHITECTURAL APPOINT-MENTS VACANT

Rate: 1/9 per line, minimum 3/6, average line six words.

ARCHITECTURAL ASSISTANT, London, Final standard, Industrial and commercial, Progressive and interesting, Salary according to experience and ability, Box 3667, [0079]

ARCHITECTURAL ASSISTANT, Intermediate standard, Busy London office. Good prospects.



Builders of Industrial Estates require

CHITECTURAL

ASSTS (INTERMEDIATE TO FINAL)

& JUNIOR ASSTS.

to work on varied and interesting industrial projects, for their rapidly expanding Architects' Departments at DARLINGTON and TUNBRIDGE WELLS.

Applicants should be prepared to work in teams on progressive design and con-struction techniques. These positions offer good opportunities to keen men. Salary according to experience and ability, but generally in the range £600-£900 for senior appointments.

Please write in confidence, giving brief details of experience, age, etc., etc., to:

Chief Architect, Atcost (Factories) Ltd., York House, Tunbridge Wells, Kent. One of the ATCOST Group of Companies.

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required by MINISTRY OF WORKS

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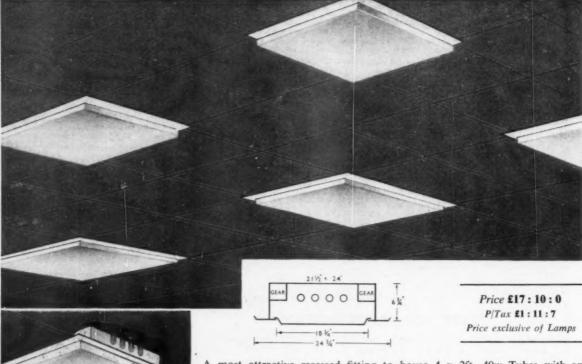
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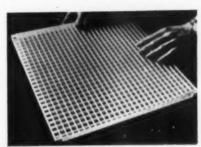
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